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ABSTRACT

This report presents an analysis of the attitudes of parents, teachers, and school administrators to the Chattanooga Incremental Dental Care Program. This project provided dental care in the public elementary schools at specific intervals of time to specific age groups in order to establish and maintain a state of oral health. Dental services were extended to recipients of the care in an incremental fashion. That is, cohort A entered the program at time "a" and received all dental services required to remedy existing oral health problems; the cohort was subsequently provided dental care at annual intervals to maintain the desired state of oral health. The next and subsequent years' cohorts entered the system in their respective annual increments, and were treated in the same fashion. The project began with eligible first graders, so that after a period of six years, all children were receiving annual dental care. This final report describes the methods and procedures of the program, the results of the program, a summary of the project, and conclusions. The instrument used to measure the attitudinal acceptance of the program on the part of school personnel and parents of the children was a survey employing personal interviews. The results of the survey are analyzed and presented in the form of tables and narrative description. Two appendices give details of a sample interview design and survey instruments with relative frequencies of actual responses to forced-choice questions. (JD)

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# FINAL REPORT

# SURVEY OF ATTITUDINAL ACCEPTANCE OF A CHILDREN'S INCREMENTAL DENTAL CARE PROGRAM BY PARENTS, TEACHERS AND SCHOOL ADMINISTRATORS

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# I. INTRODUCTION

## A. Overview of Study Purpose

The Chattanooga Incremental Dental Care Program[1] was a pilot study of a children's incremental dental care plan developed in response to calls for a national dental care program for children by President Lyndon B. Johnson in 1966 and by the American Dental Association in 1967. The Chattanooga program started in 1968 when the Division of Dental Health, U.S. Public Health Service, entered into a contract with the State of Tennessee for a children's incremental dental care program in six Tennessee counties.[2] In 1970, the program was enlarged to 10 counties in southeast Tennessee and three counties in northwest Georgia and has been administered by the State of Tennessee, Department of Public Health.

The Chattanooga Incremental Dental Care Program, often referred to as the Chattanooga Project, provided dental care incrementally. Incremental dental care consists of the provision of dental services at specific intervals of time to specific age groups in order to establish and maintain a state of oral health. Such dental services are extended to recipients of the care in an incremental fashion. That is, cohort A will enter the program at time "a" and receive all dental services required to remedy existing oral health problems; the cohort is subsequently provided dental care at annual intervals to maintain the desired state of oral health. The next and subsequent years' cohorts enter the system in their respective annual increments and are treated in the same fashion.

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[1] More formally, the project is referred to as the Northwest Georgia-Southeast Tennessee Dental Project.

[2] Major funding for the provision of services after April 1970 was received from the Appalachian Regional Commission with matching monies from the States of Tennessee and Georgia through the Georgia-Tennessee Regional Public Health Commission. However, the Division of Dentistry (formerly the Division of Dental Health) continues to provide data processing services for the Chattanooga Incremental Dental Care Program.

In the Chattanooga Project, eligible first graders each year received an oral examination, prevention services, and remedial dental care. Children who had previously entered the program as first graders were provided maintenance dental services as they progressed through subsequent elementary grades. For example, in 1969, the second cohort of first graders began participating in the program. The 1968 cohort continued in the program on a maintenance basis for the second and subsequent years. A new first grade cohort has entered the program each year, and those who entered the program in previous years have continued to be examined and treated from year to year. Thus, the program eventually provided services for eligible children in all six elementary grades by adding each year's "increment" of first graders and extending the grade coverage as children previously admitted were promoted. Such a method of implementing a program, by its very nature, may exclude or include children within the same family based solely on the children's ages. In some families it is possible that one child might be excluded because the child is too young, another excluded because too old, while another might receive services.

Charged with the responsibility of developing the knowledge necessary to assess the impact of the environment on dental delivery systems,[3] the Division of Dentistry contracted with the Research Triangle Institute (RTI) to conduct a study to measure the degree of attitudinal acceptance or nonacceptance by parents, teachers, and school administrators of the Chattanooga Project, to determine factors associated with such acceptance or nonacceptance, and to determine how well the incremental nature of the program in the Chattanooga Project has been accepted. Because the program is the only one of its kind in the United States, such a study provides information not otherwise available. In addition, guidelines have resulted for estimating the public acceptance of such a program in other parts of the country. Such estimates are particularly important in light of the U.S. Department of Health, Education, and Welfare's 1977-81 Forward Plan section on National Health Insurance (NHI), the dental services part of which proposes to provide dental care to children on an incremental basis. Since little beyond the fact of passive participation is known about public acceptance of such a plan, the Chattanooga Incremental

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[3] Regulations published under the Public Health Service Act, Section 301, and subsequent programmatic decisions detail these responsibilities.

Dental Care Program has provided a unique opportunity to explore the sentiment of an involved public toward an incremental program and thereby to provide a basis for assessing possible national response to the NHI proposal for dental services to children.

In this particular program, behavioral evidence may not validly reflect attitudes. The little evidence of parental acceptance that does exist is based merely on the one-time signing by parents of an authorization to treat the child, the child's subsequent receipt of care during school hours so that all logistic details were handled by the school system, and the failure of any parents to withdraw their children from the program because of expressed dissatisfaction. Thus, behavioral evidence reflects only passive acceptance, at best, and may stem as much from lack of alternatives for indigent families as from positive feelings about the program.

Teachers and school administrators are included in this study since enrollment of the children in the Chattanooga Incremental Dental Care Program was accomplished through the school system with the cooperation of teachers and school administrators and care was provided during school hours.

## B. Description of the Georgia-Tennessee Dental Project

Lewis and Monroe (1974) provide an excellent description of the initiation, operation, and features of the overall Chattanooga Project. Certain aspects of the program, while discussed or at least mentioned in that article, also need to be considered here because of their impact on the present study.

In order to provide actual services to the children enrolled in the program, the following mechanisms were used: (1) private practice, (2) fixed clinics, (3) mobile clinics, and (4) a combination of these. Since some areas either had no private dentists available to participate in the program or the private dentists in the areas were unable to participate due to heavy patient loads, a staff of salaried dentists and dental assistants was employed in the administration of the program. Private dentists gave treatment in their offices and salaried dentists gave treatment in fixed clinics or in mobile units. The delivery system strategies depended on the needs of the area, the availability of private dentists, and the existence of public clinical facilities. These different mechanisms for the delivery of dental services may have resulted in the program's having more visibility in some service areas than in others. For example, the presence of a mobile van for several days in a rural school yard was more noticeable because they were unusual, while the fixed clinics and private practitioners' offices were (or came to be) established parts of the local environments.

Enrollment cards were distributed to first graders by first grade teachers, for completion by the children's parents or guardians. Once the forms were completed and returned, the children were chosen for inclusion in the program based on their family's economic status. Using Office of Economic Opportunity guidelines for poverty levels based on family size and income, eligibility for participation was determined. Basing eligibility for participation in the program on income was necessary in order to assure provision of services to those least able to secure dental care privately. The population of families thus served tended to be extremely homogeneous with respect to education, knowledge about and access to dental care, and other characteristics, all of which may have affected this study by reducing variation in the phenomena of interest.

The opportunity to experience inclusion or exclusion because of the program's incremental extension of services was contingent on not having first been excluded on the basis of family income; hence, acceptance or nonacceptance of the incremental feature is probably not independent of feelings about the provision of services to low income families. Further complicating the picture with respect to the incremental feature is the fact that dental care was provided to children with critical dental conditions in higher grades not covered by the incremental plan, particularly in remote rural areas with no other dental services and among Chattanooga and Hamilton County families whose Medicaid coverage entitled them to care in local public health clinics.

Several other types of data were collected as part of the operations of the incremental program. Demographic material was compiled on each child from information supplied on the enrollment cards and detailed records were kept on all facets of the dental examination for each child and on any subsequent dental work done for the child. These "dental facets" ranged from the standard dental profile of the child to information on the time required for the care to the cost of the care; allied problems such as providing transportation to and from the dentists were documented; and various characteristics of the participating dentists (private or salaried and working in a mobile unit of fixed clinic) were noted and linked to the data base of the child being treated. This information was initially utilized for management of the Chattanooga program. The information is now being used to explore a variety of issues by several research studies concerned with the Chattanooga program. Selected data from the information base are being used in conjunction with this study to determine the project's possible applicability for other parts of the country.

The fact that enrollment, scheduling, and most of the transportation arrangements were accomplished through the public school system and that the care was provided during school hours resulted in an almost perfect rate of completed treatment. Willingness of teachers and principals to permit access to participating children in this way, in many cases to provide transportation, and to conduct extra sessions with the participating children to make up missed class time was an important factor in program efficiency.

In seven of the school systems served by the program, the burden of ensuring the most effective interface between the Chattanooga Project and the educational organizations fell on persons serving the role of "health coordinator." These health coordinators were employees of their respective school systems whose duties included responsibility for student health affairs; in some cases, these persons were actually nurses. Scheduling appointments and arranging transportation to the dental care locations, assuring complete coverage of all eligible children and contacting parents to encourage participation or to explain treatment, describing problems to Chattanooga Project staff and recommending treatment for children with critical dental conditions but who were not strictly eligible for care were tasks performed by health coordinators, in addition to funneling enrollment forms from the schools to the program and schedules from the program to the schools. As a result of the health coordinators' key role in program implementation and since the program operated through the educational system, the attitudes of school system superintendents, health coordinators, principals, and teachers were relevant for this study.

## C. Issues Addressed by This Study

In sponsoring research on the attitudinal acceptance or nonacceptance of the Chattanooga Project and its incremental feature, the Division of Dentistry has defined three basic issues to be addressed. First, it is necessary to document feelings about the overall program and attitudes reflecting acceptance or nonacceptance of the incremental feature. For the populations of interest, the intensity of those feelings about the program and the levels of acceptance or nonacceptance need also to be described. Coincidentally with this concern for measuring attitudes about the program and its incremental aspect in the aggregate for the target populations, there is also interest in describing attitudinal acceptance levels for sex and race subgroups, among persons living in both urban and rural locations, for subgroups based on the method of care delivery, among parents with differential experience with the program based on the number of children treated and the extent of the treatment received, and among educators whose classes or schools had different proportions of students enrolled in the program. Related to this issue of describing attitudes about the overall program and its incremental feature is the desire to explore perceptions of stigma resulting from program participation and perceptions of the degree to which program participation may have interfered with students' educational activities.

The second concern of the Division of Dentistry is that this study determine factors associated with differential feelings about the program and varying levels of acceptance of the incremental feature. Identifying such factors and interpreting the nature of the associations will provide information about reasons for disliking the program and for nonacceptance of the incremental feature; such information can then be used as the basis for determining whether program changes are required or whether certain kinds of recipients of the services need special attention.

Lastly, the Division of Dentistry is concerned to know about perceived strengths and weaknesses of the program. While the few problems which did occur in the provision of dental care for individual children were handled relatively easily and effectively, the absence of widespread expressions of either satisfaction or dissatisfaction may have resulted from the lack of a formal channel for such information. By soliciting such expressions and comments from respondents regarding their perceptions of program strengths and weaknesses, this study can provide for the Division of Dentistry another basis for recommending that future programs incorporate positive features of the Chattanooga Project. In addition, features identified in this study as weaknesses or as sources of dissatisfaction can provide the basis for the development of alternatives or, in the absence of suitable alternatives, can guide action taken to ameliorate undesirable program consequences.

## II. METHODS AND PROCEDURES

The research approach used in this study was a sample survey using personal interviews. Collection and analysis of the data required to address the Division of Dentistry's concerns called for three major considerations:

1. Development of survey instrumentation; i.e., interview schedules;
2. Development of samples which reasonably represent the target groups of parents, teachers, and school administrators;
3. Development of an analytical design; i.e., deciding what information was required and how it would be used to address the Division of Dentistry's concerns.

### A. Instrumentation

#### 1. General

In anticipation of a general but not necessarily uniform acceptance of the Chattanooga Project and its incremental feature, it was considered important to establish first the existence of any differential acceptance. Having established differential acceptance, it would then be necessary to identify the factors related to that differential acceptance. Initially, it was anticipated that these factors would be of four general types:

a. Characteristics or personal traits of the children receiving the dental care and of their parents, teachers, and school administrators;

b. Features of the Chattanooga Project itself (such as the mode of delivery of the dental care) or of the setting (such as whether the participants live in a rural or urban setting) and the effects of program operation on the schools;

c. Degree of experience with the program for parents, teachers, and school administrators; and

d. The nature of that experience with the program (such as whether any problems had occurred and what those problems were).

#### 2. Instrument Development

Survey instruments were developed for this study by proceeding through three stages: (1) a pilot study, (2) actual design of preliminary instruments, and (3) pretest and modification of the preliminary instruments.

a. Pilot Study. While not always possible, development of adequate instrumentation for sample surveys generally requires an exploratory effort, often referred to as a "pilot study." Having generated the four types of factors discussed above, it became necessary to conduct a limited pilot study in the field to determine the nature and limits of the issues involved and to generate more specific representations of the factors and issues in a form suitable for inclusion in a survey interview schedule. Unstructured in-depth interviews with a small number of parents, teachers, health coordinators, school administrators, and members of participating dental teams served the following twofold purpose:

> (i) to explore the origins, complexities, and ramifications of the attitude areas in question, in order to decide more precisely what it is we wish to measure; and
>
> (ii) to get vivid expressions of such attitudes from the respondent, in a form that might make them suitable for use as statements in an attitude scale. (Oppenheim, 1966:112)

Over a period of several weeks, two RTI sociologists explored a variety of topics with informants in an effort to identify which of the factors considered potentially important were actually salient for the Chattanooga Project and to specify more precisely these salient factors. A broad topical guide was drawn up prior to the pilot study to be used in covering all the subjects initially considered important. Among the topics covered were awareness of the program and knowledge about specific features of its operation; feelings about the program and perceptions of the feelings of other types of respondents and of the children; the bases for these perceptions; effects of the dental care on children's attitudes, general health, and schoolwork; opinions on the quality of the dental care; comments and opinions about the delivery of the care through the schools; whether participation in the program resulted in stigma being attached to the children or feelings of "taking charity" and "having to swallow one's pride" among parents; and complaints and suggestions for program improvements.

As the exploratory fieldwork progressed, a few of the topics were explored in less detail as it became apparent, on the basis of unanimous and strongly expressed replies, that the issues or factors were not salient. On the other hand, several points became increasingly clear.

First, awareness of the program and knowledge about details of its operation were not widespread, particularly among, but not limited to, parents. With the exception of the health coordinators, members of all the target groups either could not remember or did not know much about the program except when its operation concerned them directly and repeatedly. For example, first grade teachers, because of their yearly part in the enrollment procedure, seemed most knowledgeable about that aspect of the program but they were generally unaware of the incremental exclusion of children in higher grades. In general, parents and teachers were unaware of the extension of dental care coverage to an additional grade level each year, though examples of some older children needing but not receiving dental treatment were often cited.

Second, neutral queries elicited feelings about the overall program that were unanimously favorable, largely because the dental care was seen by educators as "for the good of the children" and because parents were appreciative of the needed help. Probing and leading questions were required to qualify the apparently highly favorable views of the program. It was determined that informants were expressing their feelings on the basis of comparison between this program and having no dental services for the eligible children. Probes, purposely directed questions, and the opportunity to suggest improvements enabled informants to change their perspective so that the comparison could be expressed in terms of this program and some other method of providing dental care.

Finally, it became apparent that strengths and weaknesses of the program were differentially defined by the various target groups. Furthermore, differences among informants in their definitions of problems were possibly related to the different structural conditions, such as the requirement for different modes of care delivery, under which the program operated.

b. Actual Design of Preliminary Instruments. On the basis of findings from the pilot study and concerns defined by the Division of Dentistry, items were developed for inclusion in interview schedules. With respect to the crucial issue of attitudinal acceptance or nonacceptance of the incremental feature, the generally low level of awareness discovered during the pilot study, combined with the complication that family income as well as a child's grade determined participation, dictated that the incremental feature be presented as simply and graphically as possible and that awareness of the feature be determined before acceptance or nonacceptance was measured.

Similarly, a limited level of overall awareness about the program was discovered during the pilot study, so schedules were designed and items included to take this into account. For all the target populations, but particularly for parents, Gallup's (1947) quintamensional design was the approach taken. In this approach, *awareness* of the attitude object is first determined, then *uninfluenced* general *attitudes* about the same object are elicited. *Specific* *attitudes* are measured and *reasons* for holding these attitudes are explored. Finally, a measure of the *intensity* of feelings is included (Smith, 1975:177-8). While it was not usually necessary to ask five separate questions for every topic covered in the interviews, these five dimensions were incorporated into designing the flow of the content of the interviews. An overall knowledge screen was incorporated into the parent interview so that only parents aware of their children's participation in the program would be allowed to express attitudes about the program and specific elements of its operations. For all respondents, contingency questions were frequently included to preclude asking for specific information from persons without knowledge of the subject.

Another major issue covered in the design of the instruments was the solicitation of information regarding strengths and weaknesses of the program in order to provide guidance for future programs. To the extent possible, specific topics were addressed and forced choice items were created. Where there were indications from the pilot study that complaints might emerge or problems might be mentioned but that the range of such topics could not be anticipated, open ended questions were included.

Finally, provisions for demographic and contextual and structural variables were included. These items included such variables as race and sex, family size, percentage of all students in a school eligible for the program, grade taught, mode of dental care delivery, type of respondent, measures of perceptions of other respondents' feelings, amount of contact with the program, and whether the school was in an urban or rural area. Three different but overlapping interview schedules were designed, one for each of the three target populations: parents of participating children, teachers in participating schools, and administrators (principals, health coordinators, and superintendents) in participating schools and school systems.

c. Pretest and Modification of Survey Instruments. The preliminary interview schedules were pretested in the third step of the instrument development activity. The instruments were pretested with a small number of respondents from each of the target populations who were known not to be in the sample. Each instrument used in the pretest was carefully evaluated item by item for content flow and comprehensibility for the respondents and indicated refinements in the survey instruments were made. No significant changes in the overall study design or instrument content (changes were minor word changes and question reformatting) resulted from the pretest.

## B. Samples

To assess how well the Children's Incremental Dental Care Program has been accepted, personal interviews were conducted with a sample of parents, teachers, and school administrators in the 13-county Project area in southeast Tennessee and northwest Georgia.

### 1. Populations of Interest

The persons associated with the program, whose acceptance or nonacceptance are pertinent to this study, comprise the target population and are classified into the following groups:

4,150[1/] - families with children in grades 1 - 6 that have participated in the program by receiving services in the 1974-75 school year;

1,720[1/] - teachers whose students have participated in the program, or who have been otherwise associated with the program;

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[1/] Estimated according to $\Sigma W_i$ where $W_i$ are weights for parents and teachers (see appendix A, pages A-10 and A-11, for a discussion of the calculation of these weights).

203 - principals of participating (1974-75) schools, superintendents of participating school systems, and health coordinators of participating school systems.

It is important to be aware of study limitations resulting from the definition of the target population. The population, comprised of all parents with children ever enrolled in the program, was not sampled because of concern about the recall difficulties among parents who have not had recent experience with the program and because of the cost of locating these parents. Rather, as defined above, only families with children in the elementary grades or in Head Start centers who received care through the program in 1974-75 were sampled. This "narrowing" of the target population resulted in the exclusion from the sample list of approximately one-half of the total number of program participants. Hence, inferences should be similarly restricted to relate only to families with children in grades 1 - 6 (and Head Start programs) who were actively enrolled though not necessarily receiving care in the 1974-75 program year.

Undoubtedly it will be of interest to relate the study results to the program without limiting the inferences to one-half of the participants. As noted above, such inferences are not strictly defensible; however, one might compare the demographics of the two sets--inactive and active enrollment for 1974-75. This comparison is presented in table 1 and reveals that the two 50-percent subsets are statistically different for race and sex composition and, hence, do not really constitute random subsamples. These comparisons may, however, be somewhat reassuring because the magnitude of the differences is small relative to the proportions themselves for the demographic variables that were investigated. For responses that are correlated with marital status or income, inferences for all program participants would seem to be a reasonable (but not rigorously defensible) extension of the results. Note that this comparison does not comprise conclusive evidence about the similarities or differences for factors other than the four investigated, including the factors of interest in this study, such as attitudes about the program. One approach that might be used to extend inferences

## Table 1

## Comparison of Active and Inactive Enrollment for the 1974-75 Program*

| Characteristic | Received Services in 1974-75 |  | Enrolled but Did Not Receive Services in 1974-75 |  | Test Statistic, Z (Standard Normal Variate) |
|---|---|---|---|---|---|
|  | Number | Percent | Number | Percent |  |
| **Sex** |  |  |  |  |  |
| Male | 3,917 | 49.2 | 4,164 | 51.6 | -2.141*** |
| Female | 4,043 | 50.8 | 3,910 | 48.4 | 2.141*** |
| Total | 7,960 | 100.0 | 8,074 | 100.0 |  |
| **Race** |  |  |  |  |  |
| White | 5,112 | 64.2 | 5,991 | 74.2 | -9.663*** |
| Black | 2,839 | 35.7 | 2,076 | 25.7 | 9.671*** |
| Spanish | 9 | ** | 4 | ** | - |
| Other | 0 | 0 | 3 | ** | - |
| Total | 7,960 | 100.0 | 8,074 | 100.0 |  |
| **Marital Status of Parents** |  |  |  |  |  |
| Married | 3,977 | 61.6 | 3,254 | 61.8 | -0.174 |
| Divorced | 991 | 15.3 | 876 | 16.6 | -0.765 |
| Separated | 741 | 11.5 | 619 | 11.8 | -0.172 |
| Widowed | 109 | 1.7 | 49 | 0.9 | 0.437 |
| Other | 638 | 9.9 | 470 | 8.9 | 0.566 |
| Total | 6,456 | 100.0 | 5,268 | 100.0 |  |
| **Family Income ($)** |  |  |  |  |  |
| Less than 2,400 | 2,580 | 38.7 | 2,211 | 40.5 | -1.270 |
| 2,400-2,999 | 1,159 | 17.4 | 1,015 | 18.5 | -0.666 |
| 3,000-3,599 | 984 | 14.7 | 834 | 15.3 | -0.557 |
| 3,600-4,199 | 827 | 12.4 | 671 | 12.3 | 0.058 |
| 4,200-4,799 | 551 | 8.3 | 377 | 6.9 | 0.797 |
| 4,800-5,399 | 457 | 6.8 | 288 | 5.3 | 0.848 |
| 5,400 and over | 111 | 1.7 | 63 | 1.2 | 0.292 |
| Total | 6,669 | 100.0 | 5,459 | 100.0 |  |

*Based on data from the Division of Dentistry enrollment files.

**Less than 0.5 percent.

***Z-statistic calculated according to $(\hat{p}_1 - p)/[p(1 - p)/n]^{.5}$ is significant at the 95 percent level of confidence or greater. (For marital status and income, the statistic is a t with $n_1 + n_2 - 2$ degrees of freedom because of large numbers of records for which the information is unknown.)

beyond the target population to include all program participants is to adjust responses that are related to sex and race. The adjustment would tend to account for the fact that fewer male and fewer white participants were in the 1974-75 program compared to all program participants. The assumption required for such an extension is that relationships between race-sex categories and survey responses noted for the 1974-75 participants are also characteristic of persons on the inactive rolls.

Results for health coordinators and superintendents are not substantially affected by the restricted definition of the target population because most of the approximately 60 out of 240 schools listed on the program files as having no program participants during 1974-75 were Head Start centers and kindergartens. These centers, by definition, are not in the program; more importantly, they have reportedly had little experience with the program. These pre-elementary schools were included in the sampling frame if they reported active participants in 1974-75. Study findings relating to principals and teachers, therefore, are essentially valid for all elementary schools that have initiated the program. Additional detail is provided in appendix A on exclusions from the sampling frame.

### 2. Stratification and Sample Selection

The sample design can be described as a stratified two-stage cluster sample in which all of the school systems' 19 superintendents and 7 health coordinators as well as a probability sample of the principals, teachers, and parents were interviewed. Schools are the primary sampling units (PSU's). They constitute the final stage sample units for the school principals and, at the same time, comprise the clusters of secondary sampling units (SSU's) of teachers and parents. (Sample parents were identified by linking with a sample of students who were selected from the rolls of the program in 1974-75.) The schools were first stratified into four strata according to the type of delivery system offered in the particular school: (1) clinic, (2) mobile units, (3) private practice, or (4) any combination of these three basic delivery systems. Within each of these primary strata, the schools were partitioned into two substrata according to population density of the county in which the school is located.[2] The resulting eight strata are approximately equal in size (measured by the number of students in the incremental dental care program who received services in the 1974-75 school year). PSU's were selected with probability proportional to size (PPS). Within each sample school, sample elements in each inference group were selected with approximately equal probabilities. A strictly simple random sample of parents was not obtained because precise selection probabilities were not known until after the survey was completed, although it was known that a parent's probability of selection on the basis of the list of Program enrollees would be very closely related to the actual number of that parent's children in a sample school.

The sample size was intended to ensure with reasonable confidence that estimates of program acceptance levels could be made with less than 10 percent error. Schools were sequenced by geographic location within each of the eight major strata and sampled two per "zone" to achieve a quasi-geographic stratification and the capability of estimating statistical precision. Students were sampled from a listing of enrollees served during 1974-75 sequenced by length of time in the program. Teachers were stratified by grade level and a simple random sample was selected with replacement from each of two grade categories (strata). The stratification is characterized in table 2, which presents population counts, and in table 3, which presents sample counts. For purposes of analysis, the "zones" alluded to in table 2 should be treated as strata, that is, stratum 1 (fixed clinics in an urban setting) contains 12 substrata. The detailed sampling design is presented in appendix A.

### 3. Effects of Sampling Design on Analysis

The sample designs differ somewhat by type of analysis unit and, hence, the analysis of data is different for each. The sample designs and type of analyses are previewed here:

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[2] Specifically, a county was classed as "rural" if 55 percent or more of its population was rural according to the 1970 Census of Population.

Table 2

Population Counts by Stratum*

| Stratum | Principals | First Grade Teachers** | Teachers, grades 2-6** | Parents** | Number of Zones or Substrata |
|---|---|---|---|---|---|
| 1. Urban fixed clinic | 29 | 52 | 262 | 1406 | 12 |
| 2. Rural fixed clinic | 12 | 10 | 53 | 220 | 2 |
| 3. Urban mobile unit | 16 | 23 | 131 | 324 | 2 |
| 4. Rural mobile unit | 37 | 65 | 205 | 794 | 7 |
| 5. Urban private practice | 41 | 89 | 437 | 678 | 6 |
| 6. Rural private practice | 22 | 33 | 238 | 286 | 5 |
| 7. Urban combination | 13 | 19 | 40 | 293 | 3 |
| 8. Rural combination | 7 | 11 | 54 | 151 | 2 |
| Total | 177 | 302 | 1420 | 4152 | 39 |

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*Superintendents (19) and health coordinators (7) were not classified by stratum because it was not necessary for sampling purposes and because within almost all the school districts, some combination of two or more modes of care delivery was used.

**Estimated according to $\Sigma W_i$ where $W_i$ are teacher or parent weights (see appendix A, pages A-10 and A-11, for a discussion of the calculation of these weights).

## Table 3

## Sample Counts (Respondents) by Stratum

| Stratum | Principals (Schools) | First Grade Teachers | Teachers, Grades 2-6 | Parents* |
|---|---|---|---|---|
| 1 | 16 | 21 | 38 | 147 |
| 2 | 3 | 5 | 6 | 30 |
| 3 | 3 | 4 | 7 | 19 |
| 4 | 12 | 14 | 28 | 97 |
| 5 | 9 | 15 | 20 | 80 |
| 6 | 8 | 11 | 16 | 57 |
| 7 | 4 | 5 | 9 | 28 |
| 8 | 3 | 5 | 5 | 27 |
| Totals | 58 | 80 | 129 | 485 |

*Includes 13 parents counted twice because two different children in the family were each selected once in the sample.

| Analysis unit | Sample design | Type of analysis |
|---|---|---|
| Superintendents | Complete enumeration | Unweighted |
| Health coordinators | Complete enumeration | Unweighted |
| Principals | Stratified random sample | Weighted |
| Teachers | Two-stage, stratified cluster sample | Weighted |
| Parents | Two-stage, stratified cluster sample | Weighted |

Analyses involving principals, teachers, and parents involve the use of weighted observations. The weights must be used to obtain unbiased estimate of parameters, such as totals, averages, and proportions, and to estimate the precision of these statistics. Hypothesis testing, using statistics such as chi-square, and the investigation of association between variables, through correlation or regression techniques, must also reflect the survey design and concomitant weights. Where appropriate, therefore, estimates of parameters, such as proportions, are accompanied by appropriate standard error estimates based on the sampling design to permit interpretation of the statistics and to provide estimates of the accuracy of inferences from these statistics. In addition, the sizes of the populations of principals, teachers, and parents to which parameter estimates apply are furnished.[3/] Analysis techniques, weight calculations, and selected references are presented in appendix A.

## C. Analysis Considerations

### 1. Analytical Strategy

Cross-sectional surveys conducted only once produce data which are technically not amenable to causal analysis. In studies like the present one where the phenomena of interest are based on specific but not necessarily theoretically related concerns, this weakness of cross-

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[3/] Estimates of the sizes of these populations vary for different variables because of variations in item nonresponse and in the application of weights. Item nonresponse occurred so infrequently and unsystematically in this study that records containing a missing response for an item were simply deleted entirely from analyses involving that item without comment. The technique used in this study for application of weights to obtain unbiased estimates involved multiplying variable values by fractional weight values, computing all statistics not dependent on whole numbers on the basis of these fractional numbers, then rounding cell and marginal counts for reporting in tabulations. Owing to the mechanics of rounding, therefore, the reported size of a study population may vary slightly from table to table.

sectional survey data becomes acute. As a result, the overall method of analysis for this study must be descriptive. While some correlational analysis is conducted, causal interpretations should not be imputed to associations found between variables.

Rather, the issues on which this study focuses, feelings about the overall provision of dental care for children through the Georgia-Tennessee Dental Project and attitudinal acceptance or nonacceptance of the project's incremental feature, become dimensions along which the target groups are differentiated. With measures of these phenomena serving as "criterion variables," the analytical strategy adopted here is to explore the ability of other variables to discriminate between groups of persons with favorable and unfavorable feelings about the program and between groups of persons for whom the incremental feature is acceptable and unacceptable.

Based on this analytical strategy, items were constructed and instruments were designed to provide measures of the criterion variables and to incorporate a reasonable variety of discriminant variables. While some items were included in the survey instruments to address specific questions without having also to serve as discriminant variables, retention and revision of most items after the pretest was contingent on their anticipated worth as discriminators on the criterion variables in the analysis plan.

Demographic variables, such as age, race, sex, and parents' education, and screening questions were included in the instruments primarily to serve as control variables so that the possibility of spurious association between discriminant and criterion variables could be checked.

2. Units of Analysis

Consistent with most treatments of survey data, the units of analysis in this study are individuals. While structural and contextual phenomena can reasonably be expected to be associated with feelings about the program and levels of acceptance of the incremental feature, variables representing such supra-individual phenomena are assigned to the respondent individuals. Since the purpose of this research is not to study the program itself and since the criterion variables are properties (feelings and attitudes) of individuals, structural and contextual distinctions will be used to classify individuals and thus will serve only to change the levels at which individuals as units are analyzed.

## D. Data Collection

The data were collected via structured interviews conducted by 11 field interviewers under the direct supervision of an RTI survey specialist.

### 1. Contact with School Officials

During the last week of December 1976, a letter from Dr. G. Fox Monroe, Director and Coordinator of the Children's Incremental Dental Care Program and Regional Director of the Southeast Regional Office of the Tennessee Department of Public Health, was sent to superintendents of the school districts containing sample schools in order to obtain their cooperation. Included in the mailing was a letter from the RTI project leader explaining the survey, identifying the sample schools in each superintendent's district, and indicating what assistance was needed. Ten days later a similar mailing was made to principals of sample schools, including Staff and Parent Listing Forms with explanations of their use and instructions for their completion. A follow-up letter from RTI was sent to principals approximately one week before the interviewers were scheduled to contact the schools. This letter reminded principals of the study and its importance, requested that the forms sent earlier be completed if not already done, and advised that interviewers would be calling within a few days.

### 2. Meetings and Interviews with School Personnel

Following completion of their training on January 20, 1977, field interviewers began making telephone contacts with sample school principals. Because of bad weather (several heavy snowfalls), the natural gas shortage, and the resulting extended school closings, three weeks elapsed before all principals could be found and appointments could be arranged. Upon meeting the sample principals, interviewers explained the study, interviewed the principals, secured completed Staff and Parent Listing Forms, and selected each school's sample of teachers. When possible, interviews with the sample teachers were completed or arranged during this visit.

During this same early phase of the fieldwork, interviews with school system superintendents and health coordinators were also completed.

## 3. Interviews with Parents

Information needed to locate parents of students included in the study sample was furnished on the Parent Listing Forms completed by school personnel, if the schools had addresses for the students, either current or last known (for 15 sample children, no records of any kind could be found). Because school closings delayed immediate acquisition of many Parent Listing Forms, interviewers sought locator information for many families from other sources, using the names of sample children from their own extra copies of Parent Listing Forms.

Especially in rural areas, the bad weather during late January and the last three weeks of February prevented access to the homes of many parents. Interviews were conducted in the homes of parent respondents (and in the homes of some teacher respondents whose schools were closed). An original visit and a minimum of three callbacks at different times of day were made in an attempt to secure interviews. Teachers and parents who had moved from their 1974 addresses within the 13-county area served by the Georgia-Tennessee Dental Project were reassigned to other interviewers. Interviews were completed with either parent of a sample child, although the mother was asked to be the respondent when both parents were present. If neither parent was living in the household, the adult responsible for the sample child was interviewed (see table 4).

Table 4

"Parent" Respondents' Relationships to Sample Children as a Percentage of all Respondents

| Relationship | Number | Percent |
|---|---|---|
| Mother (or step-mother) | 429 | 88.5 |
| Father (or step-father) | 24 | 5.0 |
| Grandmother | 23 | 4.7 |
| Aunt | 6 | 1.2 |
| Foster mother | 3 | 0.6 |
| Totals | 485* | 100.0 % |

*Includes 13 parents counted twice because two different sample children were selected from each family.

By the last week of March 1977, interviews had been completed for 19 superintendents, 7 health coordinators, 57 principals, 209 teachers and 472 parents. One superintendent is also the principal of a sample school. For 13 parent respondents, two different children were included in the sample. As a result, 1 more administrator record and 13 more parent records than respondents are available. Table 5 presents response rates based on these available records for each type of respondent, and table 6 provides the reasons for nonresponses.

Table 5

Response Rates Based on Available Record
by Type of Respondent

| Type of Respondent | Sample Size | Number of Available Records | Response Rate |
|---|---|---|---|
| Administrators | 84 | 84 | 100.0 % |
| Teachers | 228 | 209 | 91.7 |
| Parents | 566 | 485 | 85.7 |
| Overall Results | 878 | 778 | 88.6 % |

## Table 6

### Reasons for Nonresponse by Type of Respondent*

| Reasons for Nonresponse | Teachers | | Parents | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent of Sample | Number | Percent of Sample | Number | Percent of Sample |
| Refusal | 4 | 1.8 % | 5 | 0.9 % | 9 | 1.0 % |
| Not home after callbacks | 1 | 0.4 | 11 | 1.9 | 12 | 1.4 |
| Physical or mental handicap | 1 | 0.4 | 3 | 0.5 | 4 | 0.5 |
| Moved out of sample area | 12 | 5.3 | 47 | 8.3 | 59 | 6.7 |
| Unable to locate, no record of family | 1 | 0.4 | 15 | 2.6 | 16 | 1.8 |
| Overall nonresponse | 19 | 8.3 % | 81 | 14.3 % | 100 | 11.4 % |

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*Since all administrators responded, no data about their nonresponse are included here.

# III. RESULTS

In this chapter, results of the analysis of data are presented in three major sections. First, the criterion variables are defined and their distributions are described and qualified on the basis of prior knowledge about the incremental feature. Then attitudinal acceptance or nonacceptance of the program and its incremental feature are described for various subgroups, defined demographically or in relation to the program or the school system. Finally, the results of attempts to derive models incorporating sets of the most important factors associated with attitudinal acceptance or nonacceptance of the program are presented.

## A. Acceptance of the Children's Incremental Dental Care Program and Its Incremental Feature

This section provides the operational definitions used in this study for attitudes about the program and its incremental feature, describes the levels of attitudinal acceptance, demonstrates the association between attitudes and prior knowledge of the incremental feature, and presents data on the willingness of school personnel to recommend a similar program.

### 1. Operational Definitions of the Criterion Variables

Two different variables are used in this study to measure, first, feelings about the overall Chattanooga Project and, second, attitudinal acceptance or nonacceptance of the incremental feature.

a. Feelings About Overall Program. During the pilot and pretest phases, attempts were made to measure attitudinal acceptance or nonacceptance of the children's incremental dental care program along several dimensions. Among the dimensions felt to reflect the general phenomenon of attitudinal acceptance of the program were acceptance itself, satisfaction, tolerance, approval, endorsement, and objection. When questioned along the dimensions of acceptance, satisfaction, and tolerance, informants responded either unanimously and intensely favorably or had difficulty relating their feelings to these dimensions. The ideas of endorsement and objection were useful for eliciting reasons for having favorable or unfavorable feelings about the program, but construction of neutral attitude measures that would permit the expression of either negative or positive responses was impossible along either of these dimensions singly. Only the approval-disapproval dimension seemed universally meaningful, connotatively neutral, and therefore capable of validly measuring the attitude and of reliably reflecting any variation in feelings about the program. To enable comparison of the responses from the different target groups, the following items designed to measure attitudinal acceptance or nonacceptance of the overall program were used because parents seemed most responsive to the liking-disliking terminology:

(1) Asked of parents: "Overall, how did you feel about the program? Did you like it, dislike it, or were you neutral?"

(2) Asked of teachers, principals, health coordinators, and superintendents: "How about your own feelings about the dental care program? Did you like it, dislike it, or were you neutral?"

Response categories for both versions of the question were phrased identically:

Liked it very much
Liked it
Didn't seem to care one way or the other (neutral)
Disliked it
Disliked it very much.

Throughout the remainder of this report, the variable resulting from these essentially identical items serves as the criterion for acceptance or nonacceptance of the overall program and is referred to as "feelings about overall program."

b. Attitudes About Incremental Feature. One of the most striking and immediate findings from the pilot study was the widespread lack of knowledge about how coverage under the Chattanooga Project was extended each year to an additional elementary grade; i.e., incrementally. Even among persons with extensive knowledge about the overall program, the level of awareness of the incremental feature was lower than expected. When asked to tell in their own words how additional elementary grades came to be included in the Chattanooga Project, informants could be easily differentiated on the basis of their awareness of the feature but none of the two or three knowledgeable informants provided an explanation clear and simple enough to be understood by all members of the target groups for this study.

Faced with this almost universal lack of awareness of the incremental feature and on the premise that respondents could neither accept nor reject something of which they were unaware, it became necessary to incorporate into the survey instruments a simple verbal and graphic explanation of the method used to implement the Chattanooga Project.

Figure 1 portrays the graphic aid used in conjunction with the verbal explanation given each respondent (and printed in each of the three instruments in appendix B). On the incremental chart, rows represent successive years of dental program operation, columns portray grades in an elementary school, and the top-left to bottom-right diagonals trace the progression of each year's first grade cohort of children through successive grades. Toothbrushes serve to distinguish figures included in the Chattanooga Project from those who, theoretically at least, never receive dental treatment through the program. No special symbolization was included to differentiate students eligible for participation on the basis of family income from higher-income students in the same grade since the purpose of the explanation was to elicit reactions restricted as much to the incremental feature as possible. Unfortunately, the family income eligibility criterion was the one characteristic of the Chattanooga Project about which almost everyone was aware and its effects on attitudes could never be completely controlled. Following verbal explanation with the aid of the incremental chart, it was possible to measure acceptance or nonacceptance of the incremental feature or, at least, to elicit on an acceptance dimension reactions to the explanation and portrayal of the incremental feature in the interview situation.[1]

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[1] This is an important distinction to keep in mind when results about attitudes toward the incremental feature are presented hereafter. An approximation of how important may be the fact that some respondents were reacting to the information received during the interview is presented in the next two sections where feelings about the program and attitudes about the incremental feature are controlled for reported prior awareness of the incremental feature.

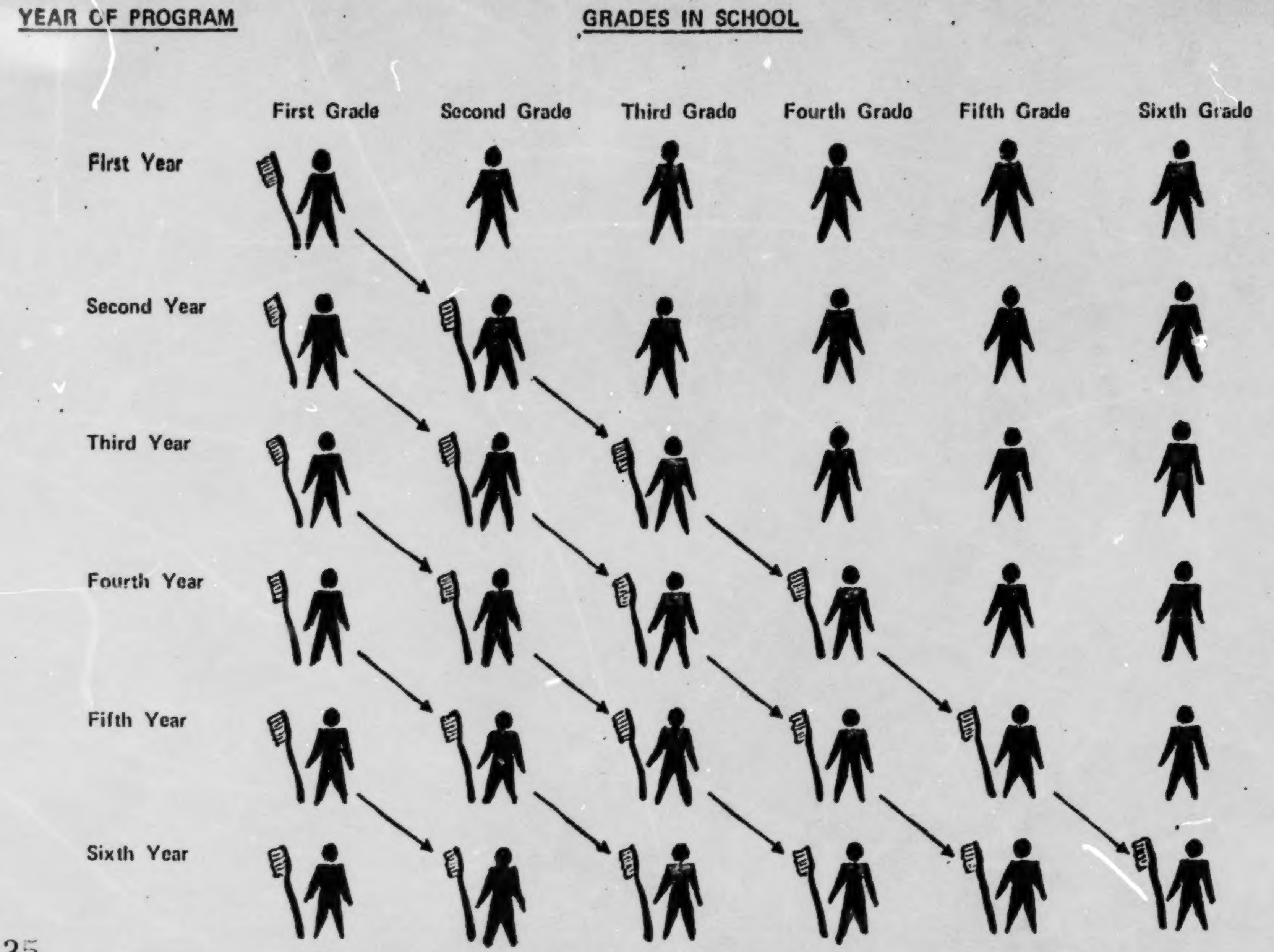
YEAR OF PROGRAM
GRADES IN SCHOOL
First Grade
Second Grade
Third Grade
Fourth Grade
Fifth Grade
Sixth Grade
First Year
Second Year
Third Year
Fourth Year
Fifth Year
Sixth Year

Figure 1. Chart Used in Explanation of Incremental Feature

Attitudinal dimensions like those discussed above were explored for their utility in measuring acceptance or nonacceptance of the incremental feature of the Chattanooga Project. Similar difficulties arose with the endorsement and objection dimensions and, additionally, for the approval and satisfaction dimensions. Apparently, the comparison implied by these dimensions is against an ideal situation, the best of all possible ways of running a program. Hence, responses elicited along these attitudinal dimensions were uniformly negative toward the incremental feature. The tolerance and acceptance dimensions, on the other hand, seemed to permit informants to judge the incremental feature against a different standard: while not perfect, the incremental method was minimally adequate. Since parents had difficulty expressing their opinions in terms of tolerance, the following question and response categories were used to measure attitudinal acceptance or nonacceptance of the incremental method of extending dental treatment in the Chattanooga Project:

> "Do you find this way of running the program acceptable or unacceptable?"
>
> (Response categories:) Highly acceptable
> Acceptable
> Unacceptable
> Highly unacceptable.

The variable resulting from this item serves as the criterion for acceptance or nonacceptance of the dental program's incremental feature and is referred to as "attitudes about incremental feature."

2. Feelings About Overall Program

As noted above, the acceptance or nonacceptance of the children's incremental dental care program by parents, teachers, principals, school health coordinators, and school superintendents was measured by ascertaining the degree to which they like or dislike the program. Table 7 reports estimates of each group's feelings toward the program.

The parents who indicated they had an awareness of at least one of their children's participation in the program[2] overwhelmingly like or

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[2] Of the parents interviewed, only eight parents showed no awareness of any of their children's participation in the program. These eight parents have been excluded from this analysis.

Table 7

Feelings About Overall Program
by Type of Respondent

| Feelings about Overall Program | Parents | Teachers | Principals | Health Coordntrs. | Superintendents |
|---|---|---|---|---|---|
| Liked it very much | 60.4 % | 54.6 % | 62.6 % | 100.0 % | 73.7 % |
| *Std. Error* | *3.0* | *4.6* | *7.9* | | |
| Liked it | 35.9 | 41.5 | 36.4 | - | 26.3 % |
| *Std. Error* | *3.1* | *4.4* | *7.6* | | |
| Didn't care one way or the other | 2.4 | 1.1 | 0.9 | - | - |
| *Std. Error* | *0.7* | *0.5* | *1.0* | | |
| Disliked it | 1.3 | 1.7 | - | - | - |
| *Std. Error* | *0.6* | *0.3* | | | |
| Disliked it very much | - | 1.1 | - | - | - |
| *Std. Error* | | *0.2* | | | |
| Totals | 100.0 % | 100.0 % | 100* % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (4186) | (1714) | (156) | 7 | 19 |

*Column total does not equal 100.0% because of rounding.

accept the program. A full 96.3% of the parents like the program or like it very much. Another 2.4% of the parents are neutral toward the program, not caring one way or the other about it. The remaining 1.3% of the parents dislike the program while no parent indicated extreme disliking for the program. Among parents then, the overall dental care program is, for all practical purposes, largely liked and accepted.

The teachers also show a majority liking for the overall program. Compared to the parents, a similar proportion of teachers, 96.1%, like the program. Fewer teachers (1.1%) than parents (2.4%) expressed neutral feelings about the program and slightly more of the teachers, 2.8%, expressed some degree of dislike for the program, including 1.1% of the teachers who dislike the program in the extreme ("disliked it very much").

The estimated proportion of school principals liking the program is even higher than for the parent and teacher groups. Ninety-nine percent of the principals reported feeling favorably toward the program. The remaining one percent of the principals are neutral. No principal expressed negative feelings toward the program.

Health coordinators, although few in number, are 100% in favor of the overall program. In addition, all health coordinators indicated they like the program very much - the extreme positive response. This is significant in that these responses come from the universe of school health coordinators who were deeply involved in the activities of the program and are, no doubt, in the best position to evaluate the worth of the program. Their overall feelings about the program are, as noted above, unanimously and extremely positive.

Finally the feelings of the superintendents, as shown in table 7 are totally positive. The superintendents, after the health coordinators, show the next largest proportion of extremely positive responses; 73.7% of them like the program very much. None of the superintendents reported being neutral or negative toward the overall program.

Overall it is evident that the children's incremental dental care program has been very well received. Estimates of liking the program for the different groups range from 96.2% to 100%. About one percent of the teachers are estimated to feel neutral toward the program with a similar estimate for the principals and a slightly higher estimate for the parents. About one percent of the parents dislike the overall program as do almost 3% of the teachers. No other group expressed a dislike for the program.

Table 8 provides estimates of how each of the groups feel about the overall dental program, controlling for whether they had any knowledge prior to the interview about the incremental nature of the program. Across all the groups it is apparent that there is no relationship between knowing about the incremental nature of the program and overall liking for the program. In comparison with table 7, some distinctions can be noted in the categories "liked it very much" and "liked it." For parents, those who knew about the incremental nature of the program tend to like the program more than those parents who claimed not to have knowledge of the program's incremental nature. Among the liking categories for teachers there appear to be no real differences attributable to preinterview knowledge about the incremental nature of the program. Principals show an opposite pattern from parents in that most principals who did not know about the incremental nature of the program like the overall program "very much" while a larger proportion of principals who knew about the feature selected the "like it" category. Again, it should be noted for all three of these groups that the choice between liking and disliking the program is unaffected by prior knowledge or lack of it about the incremental feature of the program.

Health coordinators show no variation. All the health coordinators, whether claiming prior knowledge of the incremental feature or not, like the overall program very much. Superintendents show a pattern similar to that for principals in the liking categories: most of those who did not have prior knowledge of the incremental feature like the program "very much" while a 13% larger proportion of those with prior knowledge only moderately like the program. These distinctions on liking of the program by knowledge of the incremental feature of the program do not easily lend themselves to a meaningful interpretation - in fact, they may be essentially meaningless differences. Perhaps the major lesson to be learned from these data is that prior knowledge of the incremental feature of the program seems to make little difference in feelings about the overall program.

## Table 8

## Feelings About Overall Program Among Persons with and without Prior Knowledge of the Incremental Features by Type of Respondent

| Feelings about Overall Program | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Knew Already | Didn't Know | Knew Already | Didn't Know | Knew Already | Didn't Know | Knew Already | Didn't Know | Knew Already | Didn't Know |
| Liked it very much | 72.1 % | 58.2 % | 57.9 % | 53.1 % | 57.4 % | 70.4 % | 100.0 % | 100.0 % | 66.7 % | 80.0 % |
| *Std. Error* | *6.8* | *3.3* | *9.1* | *3.8* | *11.7* | *7.3* | | | | |
| Liked it | 25.4 | 37.8 | 37.7 | 43.2 | 42.6 | 27.3 | - | - | 33.3 | 20.0 |
| *Std. Error* | *6.8* | *3.4* | *8.7* | *3.6* | *11.7* | *6.8* | | | | |
| Didn't care one way or the other | 2.4 | 2.4 | 1.4 | 1.0 | - | 2.3 | - | - | - | - |
| *Std. Error* | *1.7* | *0.7* | *0.3* | *0.7* | | *2.3* | | | | |
| Disliked it | - | 1.6 | 2.6 | 1.3 | - | - | - | - | - | - |
| *Std. Error* | | *0.7* | *1.0* | *0.2* | | | | | | |
| Disliked it very much | - | - | 0.4 | 1.4 | - | - | - | - | - | - |
| *Std. Error* | | | *0.1* | *0.2* | | | | | | |
| Total | 100* % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (648) | (3538) | (525) | (1189) | (94) | (62) | 6 | 1 | 9 | 10 |

*Column total does not equal 100.0% because of rounding.

To this point, the vast majority of persons in the target groups are estimated to have favorable attitudes toward the program. It is appropriate, then, to describe the program features which respondents mentioned as the basis for such a favorable view of the dental program. In addition, unfavorable comments about the program are described to give a balanced view.

Parents aware of their children's participation in the program were asked, prior to being questioned more specifically, to identify any things about the program which they liked or disliked. In the estimated population of 4294 parents asked what were some things they liked about the program, 3952 or 92.0% mentioned at least one program feature. Results for this group of parents are provided in the left column of table 9.[3] The most frequently mentioned feature that parents liked was the elimination of the children's dental problems. Comments in this category were made to the effect that suffering and toothaches were relieved; that needed extractions, caps, and fillings were accomplished; and that "everything that needed doing was done" (e.g., parents seemed impressed that cleaning was automatically done, even in the absence of

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[3] In table 9 and similar tables below, percentages are based on an estimate of the number of responses that would be derived from the respective populations, not on the estimated number of persons in the populatons. Responses to all open ended questions were coded into a maximum of three unique categories for each respondent; two or more comments independently coded into the same category for the same question for a single respondent were counted only once so that frequencies of mention would not be artificially inflated. The more important limitation on total estimated frequencies of mention is the fact that only a small number of respondents ever made more than one codable mention for any open ended question. On the other hand, comments about program features liked or disliked are not restricted to respondents with only corresponding feelings about the program. That is, if a respondent indicating overall liking for the program also mentioned disliking something about the program, that comment is included in the presentation of disliked program features; and program features liked by the few persons with unfavorable feelings about the overall program are not omitted from tabulations of liked program features. Since responses, not persons, are counted in these tables and since the categories' proportions of all responses are subject to the limitations discussed here, standard errors of the proportions would give an artificially high estimate of the precision of those proportions and so are not reported. The proportions themselves in these tables should therefore be interpreted relatively, as a means of ranking mentions rather than as absolute estimates of parameters.

## Table 9

### Relative Frequency of Mention of Program Features Parents Like or Dislike

| Liked Program Features | Relative Frequency of Mention | Disliked Program Features | Relative Frequency of Mention |
|---|---|---|---|
| Eliminated dental problems, did everything that needed doing | 29.0 % | Disapproval of type or quality of dental treatment | 34.5 % |
| Could not afford dental care | 21.5 | Not knowing enough about program or what was done to child's teeth | 14.7 |
| Promoted better health care | 12.3 | Pain, dreading to go or being upset after visiting dentist | 14.0 |
| Quality of dental work was high | 9.1 | Not enough children served | 7.2 |
| Convenient | 8.6 | Program did not provide enough services or do as much work as was needed | 6.8 |
| General liking, liked program | 8.4 | Incremental feature | 6.1 |
| General concern for children | 4.4 | Disapproval of dentists (too young, unfriendly) | 5.1 |
| Dentists and nurses sincerely cared about children | 4.0 | Selection not based on dental needs | 2.3 |
| Children felt special at dentists' | 2.1 | Program not still available | 2.3 |
| Notified parents, kept them informed | 0.6 | Children receiving care thought to be ineligible | 1.2 |
| | | Dental work done without parental consent | 0.7 |
| | | Miscellaneous other dislikes | 5.1 |
| Total | 100.0 % | Total | 100.0 % |
| Total (estimated) number of responses | (7467) | Total (estimated) number of responses | (918) |

the necessity for other work). The next most frequently made comments concerned the cost of dental care. As implied by the most often mentioned category discussed above, many parents knew their children needed dental care; being unable to pay for such care, they liked the fact that their children could still be treated. (Many of these parents would have gotten needed dental care through other low income medical services or even by visiting out of town dentists who would not know before treatment about their inability to pay.) The comment parents made third most frequently was that the program promoted better health care for and by their children. Children in the program were shown how to care for their teeth and were given toothbrushes, toothpaste, and disclosure tablets to encourage regular brushing. Parents were impressed with the care children took with their teeth while in the program (although there was some indication that the children neglected their teeth during summer months when the program was not active and, probably more importantly, when there were no reminders about dental hygiene from teachers). Many parents also felt that the quality of the dental work was high, a category related to the earlier discussed comment about everything being done that was needed. Finally, parents liked the convenience afforded by the schools arranging for the children to receive dental care; transportation did not have to be arranged privately (25% of these families have no automobile) and, for those employed, taking time off from work and the attendant loss of income was not necessary.

A slightly longer list of program features disliked by parents is presented on the right side of table 9. The number of all comments that fit into this "things disliked" category is substantially smaller and were made by only 13.8% (not all of whom feel unfavorable toward the overall program, it should be recalled) of the estimated population of 4294 parents asked what they disliked about the program. Among the program features disliked, the most frequently made comment was that the type or quality of treatment was unsatisfactory. This complaint often resulted from loss of a cap or filling, a child's feeling pain after the effects of an anesthetic wore off, damage resulting from chewing on anesthesized mouth surfaces, or bleeding caused by disturbing a wound. Less often, parents disagreed with the course of treatment, feeling that "not enough" or "too much" or "the wrong thing" was done. Typically, these problems were not traceable to the dentist or the actual quality of the care but either to something the child had done to exacerbate post-treatment oral conditions or to the apparently widespread beliefs that "baby teeth will come out anyway, so they should be pulled rather than filled or capped" and that "too many or good teeth were extracted, filled, or capped." Probably related to these beliefs is the criticism next most often voiced by parents that they did not know enough about the program, particularly about the treatment their children received; perhaps much of the disapproval of the type or quality of dental treatment could have been avoided had parents been informed of the reasons for particular dental procedures and of any advisable post-treatment precautions and care. The third most often made responses to the question about things parents disliked were that children dreaded going to the dentist, feared the pain of treatment, and were upset following the visit to the dentist; certainly, a similar proportion (3%) of all parents would be likely to voice similar sympathy for their children undergoing dental treatment so that the source of this category of criticism should probably not be attributed to the Chattanooga Project but to the fact that dental treatment under any circumstances is sometimes unpleasant.

The category "dental work done without parental consent" is separately listed although it was mentioned by only one respondent (and is without foundation in fact since treatment was extended only to children for whom the program had on record a consent statement signed by one parent). This illustrates the tentative nature of results based on asking respondents to recall events which may have happened as far in the past as seven years prior to the interviews. Among the remaining categories of program features disliked, it is interesting to note that the incremental feature was mentioned by some parents without prompting and that several of the criticism categories ("not enough children served," "too few services or too little work," "selection not based on dental needs") imply approval of the overall program.

Tables 10 and 11 present similar results for school officials. In table 10, based on all responses from an estimated 1516 teachers (88.2%), 140 principals (89.7%) and all health coordinators and superintendents to the question "Why did you (like or dislike) the program?", the overwhelmingly most often cited reason for liking the program stems from school officials' concern for children. That is, school officials are

## Table 10

## Relative Frequency of Mention of Program Features Liked by School Personnel

| Program Features Liked | Teachers | Principals | Health Coordinators & Superintendents |
|---|---|---|---|
| General concern for children | 67.0 % | 72.3% | 61.5 % |
| Educational benefits (e.g., reduced absences, increased health knowledge) | 19.4 | 13.0 | 12.8 |
| Parents wouldn't get needed dental care for children | 4.6 | 4.2 | 2.6 |
| Eliminated dental problems, suffering; benefits of preventive care | 4.0 | 4.2 | 10.3 |
| Children gained pride, positive self-images | 2.3 | 2.1 | - |
| Quality of dental work was high | 1.2 | 0.8 | - |
| Dentists, nurses sincerely cared about children | 1.1 | 1.3 | 5.1 |
| Program was efficient, convenient; directly helped children | 0.4 | 2.1 | 7.7 |
| Totals | 100.0 % | 100 % | 100.0 % |
| Total (estimated) number of responses | (2289) | (238) | 39 |

concerned about the overall health of all children, about the needs of low-income children, and about children with dental problems who would not otherwise receive care; that the Chattanooga project addresses these concerns is a factor in its favor. School officials agree on the second most liked feature of the program (based on frequency of mention), the educational benefits which accrue as a result of the dental care. The number of absences due to dental problems reportedly declines; the problem of children in class being distracted by toothaches (either their own or another student's) seems to occur less often, children are better able to pay attention in class, and they seem to learn and retain more personal hygiene instruction. Teachers and principals also liked the fact that dental treatment was received by children whose parents would not get the needed care, either because they could not afford it, the parents didn't realize the need for it, or because of neglect. The elimination of dental problems, suffering, and pain and the fact that minor problems were treated before they became serious oral defects is another feature of the program school officials liked, particularly health coordinators. It is interesting to note that some teachers and principals perceive psychological benefits resulting from the program, citing an increase in pride and self-esteem for some children. Health coordinators, who had regular contact with treatment personnel, praise the dentists and dental auxiliaries for their interpersonal relations with the children. Administrative features of the program and the fact that treatment was actually extended to the children themselves (rather than payment for treatment being doled out to parents) were also liked by several superintendents and health coordinators.

Based on responses from an estimated 189 teachers (11.0%) and 12 principals (7.7%), table 11 shows categories associated with program operation which are disliked. The most salient criticism from teachers was that some children receiving care were thought to be ineligible, usually based on the opinion that other children deemed more needy were denied participation but also because it was felt that some of the enrollees' parents could afford to pay for private care. Similar to parents, teachers disliked not having more information about the program, partly because first-grade teachers wanted more help in deciding which children should be given enrollment cards and partly because all teachers

## Table 11

## Relative Frequency of Mention of Program Features Disliked by School Personnel

| Program Features Disliked | Teachers | Principals | Health Coordinators & Superintendents |
|---|---|---|---|
| Children receiving care thought to be ineligible | 19.5 % | - | - |
| Didn't know enough about program or what was done to children's teeth | 17.0 | 8.3 % | - |
| Program too narrow (e.g., too few children served, too few services) | 14.7 | 50.0 | - |
| Children miss too much class, teacher load, class disruption | 11.9 | - | - |
| Disapproval of type or quality of dental treatment | 10.2 | - | - |
| Not school's responsibility; parents take for granted, come to expect it | 9.6 | - | - |
| Incremental feature | 5.9 | - | - |
| Selection should be based on dental needs | 4.8 | 25.0 | - |
| Felt children might be looked down on | 3.1 | - | - |
| Scheduling conflicts, taking too many children at one time | 1.2 | 16.7 | - |
| Miscellaneous other dislikes | 2.0 | - | - |
| Totals | 100* % | 100.0 % | - |
| Total (estimated) number of responses | (353) | (12) | 0 |

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* Column total does not equal 100.0% because of rounding.

would have appreciated more information on post-treatment care when children returned to the classroom from the dentists' facilities. Next most often mentioned by teachers and mentioned most often by principals was the notion that not enough services (orthodontic work, in particular) were provided and that not enough children were served; among these school officials, both the presence in covered grades of other children with need for dental treatment and the dental needs of low-income children in higher grades were cited in support of the desire to broaden program coverage. A related issue is the principals' second most often mentioned complaint, that selection was not based on dental needs. Interference with educational activities was a feature also disliked by some school officials (teachers cited direct classroom effects more often; principals and teachers to a lesser extent mentioned scheduling difficulties and taking too many children at one time, apparently because of the resultant difficulties in coordination and arranging adequate transportation). Disapproval by teachers of the dental treatment was most often an expression of the opinion that too much work was attempted during a single sitting. A few teachers were aware of and disliked the incremental feature of the program. Finally, no health coordinator or superintendent made any critical remarks about the program.

### 3. Acceptance of Incremental Feature

Table 12 shows the acceptance levels of the incremental feature of the program by parent, teacher, principal, health coordinator, and superintendent groups. It will be recalled that the incremental aspect of the program was explained to each respondent with the aid of a chart graphically representing the incremental nature of the program from its beginning to its termination. The respondents were then asked if they had known about this feature of the program. They were then asked if they found "this way of running the program acceptable or unacceptable." Among the parent group, 63.8% found the incremental feature of the program acceptable while 36.2% found it unacceptable. Only 3.4% of the parents found it highly unacceptable. For parents then, the incremental feature of the program is considered acceptable by nearly twice the number who find it unacceptable. Equally as large or larger proportions of the other groups in table 12 also find the incremental feature acceptable.

## Table 12

8

## Attitudes About Incremental Feature By Type of Respondent

| Attitudes about Incremental Feature | Parents | Teachers | Principals | Health Coordntrs. | Super- intendents |
|---|---|---|---|---|---|
| Highly Acceptable | 10.2 % | 16.8 % | 5.1 % | 42.9 % | 31.6 % |
| *Std. Error* | *2.3* | *3.9* | *2.6* | | |
| Acceptable | 53.6 | 50.7 | 61.5 | 42.9 | 47.4 |
| *Std. Error* | *2.9* | *2.7* | *9.3* | | |
| Unacceptable | 32.8 | 29.9 | 27.1 | 14.3 | 21.1 |
| *Std. Error* | *2.6* | *4.3* | *8.5* | | |
| Highly Unacceptable | 3.4 | 2.6 | 6.2 | - | - |
| *Std. Error* | *0.8* | *0.9* | *6.0* | | |
| Total | 100.0 % | 100.0 % | 100* % | 100* % | 100* % |
| Total (estimated) number of cases | (4137) | (1718) | (156) | 7 | 19 |

*Column total do not equal 100.0% because of rounding.

Table 13 presents data for the acceptability of the incremental feature of the program with the intervening variable of professed prior knowledge of how the incremental feature worked. For parents it appears that there are some dramatic shifts in acceptability. Those parents who claimed to be knowledgeable about the incremental feature of the program found that feature mostly acceptable (82.1%). For those parents who claimed not to have preinterview knowledge of the incremental nature of the program, a shift to finding the incremental feature unacceptable is noted, particularly in the "unacceptable" category (rather than in the "highly unacceptable" category). Comparing all of the groups in table 13 with their comparable group in table 12, this trend described for the parent group is consistently evident. Each of these other groups will be briefly discussed.

The teachers find (in table 12) the incremental feature of the program as acceptable (67.5%) as the parent (63.8%) and principal (66.6%) groups and proportionately as unacceptable overall as the parents and principals. The major differences between these three groups lie in the extremes. More teachers find the incremental feature "highly acceptable" and fewer consider it "highly unacceptable" than in the other two groups. These three groups, in comparison with health coordinators and superintendents, find the incremental nature of the program less acceptable.

The teachers, when acceptability is considered by whether there was prior knowledge or not, show a pattern unique among all the groups (see table 13). More teachers who didn't know about the incremental feature before the interview were highly accepting (20.3%) than were those who knew (9.0%), although acceptance overall for teachers who knew was greater, 81.3% versus 61.3%, than for those who didn't know. This disproportionate distribution of those who didn't know about the incremental feature to the highly acceptable category in comparison to those who did know about the incremental feature is not found for any other group in table 13. Nevertheless, the general relationship between prior knowledge and acceptance holds for the teacher group: those who knew about the incremental feature of the program before the interview find it more acceptable than those who learned about the incremental feature during the interview.

## Table 13

### Attitudes About Incremental Feature Among Persons with and without Prior Knowledge of the Feature by Type of Respondent

| Attitudes about Incremental Feature | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Knew Already | Didn't Know | Knew Already | Didn't Know | Knew Already | Didn't Know | Knew Already | Didn't Know | Knew Already | Didn't Know |
| Highly Acceptable | 21.2 % | 8.2 % | 9.0 % | 20.3 % | 6.6 % | 2.9 % | 50.0 % | - | 44.4 % | 20.0 % |
| *Std. Error* | *5.6* | *2.3* | *3.5* | *6.6* | *4.4* | *0.6* | | | | |
| Acceptable | 60.9 | 52.3 | 72.3 | 41.0 | 63.4 | 58.8 | 33.3 | 100.0 % | 44.4 | 50.0 |
| *Std. Error* | *6.8* | *3.4* | *6.2* | *4.9* | *12.6* | *12.3* | | | | |
| Unacceptable | 12.2 | 36.6 | 16.6 | 35.9 | 19.6 | 38.3 | 16.7 | - | 11.1 | 30.0 |
| *Std. Error* | *4.6* | *3.0* | *5.3* | *5.0* | *9.4* | *12.8* | | | | |
| Highly Acceptable | 5.7 | 2.9 | 2.1 | 2.8 | 10.4 | - | - | - | - | - |
| *Std. Error* | *2.5* | *0.7* | *1.5* | *1.2* | *9.8* | | | | | |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100* | 100.0 % |
| Total (estimated) number of cases | (648) | (3488) | (529) | (1189) | (94) | (62) | 6 | 1 | 9 | 10 |

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*Column total does not equal 100.0% because of rounding.

Principals, as both tables 12 and 13 show, are most likely to find the incremental feature of the program acceptable whether they knew about the incremental feature or not. However, a larger proportion of the principals without prior knowledge than of those already familiar with the incremental feature (38.3% compared to 30%) found the incremental feature of the program unacceptable to some extent. Strangely enough, 10.4% of the principals who claimed to have prior knowledge of the incremental feature consider the incremental feature highly unacceptable while none of the principals who didn't have prior knowledge found the incremental feature highly unacceptable. While the general trend of acceptability being related to prior knowledge of the incremental feature still appears to hold for this group, the "highly unacceptable" response group for the principals is peculiar.

The health coordinators fairly well agree that the incremental feature of the program is acceptable (85.8%). One of the health coordinators considers the incremental feature unacceptable while none of them find it "highly unacceptable." Of the seven health coordinators interviewed only one denied prior knowledge of the incremental nature of the program. That one health coordinator found the incremental aspect of the program to be acceptable. In general, as with overall feelings about the broad program, health coordinators are more favorable in their judgments about the incremental aspect of the program than are members of any other group.

Finally, the superintendent group (table 12) is predominately accepting (79%) of the incremental feature of the program. Approximately 21% of the superintendents found the incremental feature unacceptable while none of them found it "highly unacceptable." Table 13 shows the familiar pattern with respect to prior knowledge for the superintendent group. Those superintendents who claimed prior knowledge of the incremental feature were more accepting than those who did not have prior knowledge (general acceptance with knowledge - 88.8%; general acceptance without prior knowledge - 70%). Superintendents, like the health coordinators, are mostly accepting of the incremental feature regardless of prior knowledge. However, prior knowledge or lack of it does have a bearing on level of acceptance for this group as well as for the other groups discussed above.

Based on the general findings that prior knowledge of the incremental feature of the program is directly related to the degree of acceptance of the incremental feature and that most persons who found the incremental feature unacceptable were characterized by a lack of prior knowledge, some program stategies are suggested. It would appear that the general level of acceptance for the incremental aspect of the dental care program could be raised by informing involved parties such as the groups being discussed here about how the program operates and why it operates that way. In the interview description of the incremental feature, only the how of the incremental feature was explained, not the why. However, based on information gleaned from the pilot study, we noted that explanations about why an incremental approach was taken (e.g., cost factors) seemed to make the approach more palatable. Approximately one-third of the parent, teacher, and principal groups found the incremental feature unacceptable. Approximately one-fifth of all superintendents and one-third of superintendents who had no pre-interview knowledge of the incremental feature found it unacceptable. Only the health coordinators agreed (with one exception) that the incremental feature was acceptable. The health coordinators had a better understanding, whether they had prior knowledge of the incremental feature or not, of the implications of the incremental feature for a general ongoing health program than did any other group. This fact buttresses the contention that increased understanding of the necessity for the incremental feature of the program could reasonably be expected to increase general acceptance of that feature.

In the foregoing tables, estimates for the parent group have only included parents who, during their interviews, demonstrated awareness of their children participating in the dental program. Table 14 compares acceptance of the incremental feature among knowledgeable parents with that for the small number of parents (8 respondents, 91 estimated) who gave no indication that they knew their children were receiving some dental care through the schools. As table 14 shows, those who were unaware of their children being in the dental care program were far more negative toward and unaccepting of the incremental feature of the

## Table 14

### Attitudes About Incremental Feature Among Parents with and without Knowledge of Their Children's Participation in the Program

| Attitudes About Incremental Feature | Knew Child(ren) Had Received Dental Care | Did Not Know Child(ren) Had Received Dental Care |
|---|---|---|
| Highly Acceptable | 10.2 % | - |
| *Std. Error* | *2.3* | |
| Acceptable | 53.6 | 38.0 % |
| *Std. Error* | *2.9* | *17.3* |
| Unacceptable | 32.8 | 26.3 |
| *Std. Error* | *2.6* | *13.8* |
| Highly Unacceptable | 3.4 | 35.7 |
| *Std. Error* | *0.8* | *21.5* |
| Total | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (4137) | (91)<br>n = 8 |

program than were those parents who knew about their children's participation in a school dental care program. One possible reason for such a difference is that the two groups of parents were responding to the incremental explanation and subsequent questions on a theoretical versus experiential basis. An explanation of the incremental approach, particularly for the early years of an incremental dental care program, necessarily directs attention to the children who are excluded from care. For parents who think they have not experienced the program, this exclusion feature is, in most cases, "theoretically" unacceptable. However, the parents who have had children in the program, as well as perhaps having some of their children excluded from the program, are more likely to focus on the services that were received for at least some of their children rather than on the fact that some children may have been excluded (not exclusively, of course, because as table 12 shows, a full 36.2% of these parents found the incremental feature generally unacceptable). It was clear from the pilot study and subsequent interviewing that parents were almost unanimously grateful for and positive toward the dental care program for their children. While they would have preferred to have all of their children receive care through the program, they seemed to appreciate the services that were available, given their low income levels, and were disinclined to focus on resenting the fact that services were not available for all their children (there were, of course, a few exceptions to this imputed general parental feeling and response).

If respondents indicated that the incremental feature of the dental care program was unacceptable, they were asked what could be done to improve it (parents) or what would make it acceptable (school officials). The same pattern of suggested improvements generally emerged for each of the different groups, as can be seen in table 15.[4] The most frequent

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[4] The 5 health coordinators and superintendents and the estimated 558 teachers (32.5%), 52 principals (33.3%), and 1405 parents (32.7%) whose suggestions are the basis for table 15 all found the incremental feature unacceptable. Hence, table 15 is largely a reaffirmation of their earlier position and therefore somewhat trivial. It is presented here for two reasons: first, to show the difficulty persons associated with the program have in judging the incremental feature separately from the dental needs of nonparticipating children and from the income eligibility criterion; and second, to display other suggestions deemed important enough to merit mention in the context of a question about the incremental feature.

## Table 15

### Relative Frequency of Mention of Ways to Improve (Parents) or Make Acceptable (School Personnel) Incremental Feature of Dental Program

| Ways to Improve Program or Make Incremental Feature Acceptable | Parents | Teachers | Principals | Health Coordinators & Superintendents |
|---|---|---|---|---|
| Disregard grade, select on basis of dental need and/or income or unspecified "need" | 48.4 % | 40.2 % | 48.5 % | 60.0 % |
| Include all children; include more, no basis for selection | 44.3 | 29.6 | 19.1 | 20.0 |
| Involve parents more; provide more information | 2.3 | 3.4 | - | - |
| Include older children in same family | 2.2 | 8.8 | 1.5 | - |
| Review needs (eligibility?) of all children annually | 1.8 | 6.6 | - | - |
| Better specify selection criteria; teachers should not select | 0.7 | 0.6 | 2.9 | - |
| Disregard income, select on basis of dental need, grade not mentioned | 0.2 | - | 17.6 | - |
| Teachers know children better, should make final selection; can screen out ineligible participants | 0.2 | 5.9 | - | - |
| Provide for enrolling children otherwise eligible who transfer into school mid-year | - | 5.0 | 10.3 | 20.0 |
| Totals | 100* % | 100* % | 100* % | 100.0 % |
| Total (estimated) number of responses | (1744) | (707) | (68) | 5 |

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* Column totals do not equal 100.0% because of rounding.

suggestion from each group was to disregard grade level in providing coverage for dental care (in other words, eliminate the incremental feature) and select participants on the basis of other criteria, of which the most often mentioned was dental need, less often mentioned was income, and, least often, unspecified "need." The next most frequently mentioned suggestion by all groups is a more global version of the first: that more or even all children be included in the program. Again, this is a definite rejection of the incremental feature. But the high frequency of mention of this most inclusive suggestion indicates that many persons associated with the program, particularly parents and teachers, would probably find it difficult to limit participation on any grounds; such an interpretation is consistent with the not most frequently but persistently mentioned praise for "meeting a real need" and criticism for "excluding some children with acute dental problems" reflected in earlier tables. The category "include older children in the same family" is the purest expression of discontent with the incremental feature, but the relative infrequency of its mention seems to further indicate that attitudes about the acceptability of the incremental feature can hardly be separated from feelings about limiting participation in a dental care program for children on the basis of other criteria.

4. Recommendation by School Personnel

An indirect measure of acceptance or nonacceptance of the children's incremental dental care program which should incorporate opinions about both the educational benefits derived from dental treatment and the degree to which dental program operations interfere with educational activities is the willingness of school personnel to recommend programs like the Chattanooga Project. To this end, teachers, principals, health coordinators, and school system superintendents were asked the following question (prior to having the incremental feature explained):

> "Would you recommend to other [school officials in respondent's position] the establishment of a similar program in their schools (or school systems)?"

Table 16 shows that virtually all school officials would recommend a similar dental program to their peers in corresponding positions in the

## Table 16

## Willingness of School Officials to Recommend A Similar Dental Program by Type of Respondent

| Recommend Similar Program to Educational Peers | Teachers | Principals | Health Coordinators | Superintendents |
|---|---|---|---|---|
| Yes | 94.0 % | 95.6 % | 85.7 % | 94.7 % |
| *Std. Error* | *1.0* | *2.9* | | |
| No | 6.0 | 4.4 | 14.3 | 5.3 |
| *Std. Error* | *1.0* | *2.9* | | |
| Totals | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (1683) | (156) | 7 | 19 |

educational system. Among the most important (based on frequency of mention) reasons for recommending the program are its educational benefits - such as reduction of absences, improvement in students' ability to attend to their classwork, and increased health knowledge for the children - and the belief that anything done to help children is worthwhile, a not surprising sentiment among educators.

The reasons given by an estimated 101 teachers (5.9%), 7 principals (4.4%), and one each actual health coordinator and superintendent (7.7% of the 26 persons in these two positions) for not recommending a similar dental program are shown in Table 17. Standing out as the two most important reasons (based on frequency of mention) are the belief that parents, not the school, should be responsible for dental care of children and disapproval of governmental involvement in medical activities. The persistent theme that some children who need dental care are being denied it while others are unfairly receiving it can be seen from the third, fourth, eighth, and tenth most often mentioned (by teachers) reasons for not recommending the program. It is interesting to note that the few principals who would not recommend the program consider their teachers the best judges of who should participate, while the teachers, who would have to make the judgement, seem less eager to assume that responsibility. Finally, only a small minority (7.3%) of the few teachers who would not recommend the program cite direct interference with educational activities as a reason for their reluctance to recommend that a similar dental program be established in other schools.

## B. Description of Acceptance for Various Subgroups

Among the issues with which this study is concerned is the exploration of differences between selected subgroups in acceptance of the children's incremental dental care program. The characteristics selected for examining subgroup differences fall naturally into and are presented under two categories: demographic subgroups and program- and school-related subgroups.

### 1. Demographic Subgroups

The characteristics of sex, race, urban-rural location, and family size serve to define the demographic subgroups whose acceptance of the Chattanooga Project and its incremental feature are explored here.

Table 17

Relative Frequency of Mention of Reasons for Not Recommending a Similar Dental Program by Type of Respondent*

| Reasons for Not Recommending Dental Program | Teachers | Principals | Health Coordinators |
|---|---|---|---|
| Disapproval of government in medicine | 32.0 % | - | 33.3 % |
| Should not be school's responsibility | 30.3 | 60.0 % | 66.7 |
| Children receiving care thought to be ineligible | 14.8 | - | - |
| Not enough children served | 7.3 | 10.0 | - |
| Children miss too much class | 5.7 | - | - |
| Duplicates other low-income medical services | 4.1 | - | - |
| Class disruption | 1.6 | - | - |
| Selection should be based on dental needs | 1.6 | - | - |
| Parents take such programs for granted, come to expect them | 1.6 | - | - |
| Teachers know children better, should make final selection | 0.8 | 30.0 | - |
| Totals | 100** % | 100.0 % | 100.0 % |
| Total (estimated) number of responses | (122) | (10) | 3 |

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* The only superintendent who would not recommend a similar program gave no reason.

** Column total does not equal 100.0% because of rounding.

a. Sex. Tables 18 and 19 present feelings about the overall program and acceptance of the incremental feature for males and females separately within each of the types of respondents. Results are mixed; fathers and male superintendents seem to like the program somewhat less than their female counterparts while the reverse is true for teachers and principals, but the vast majority of both males (95.0%) and females (96.8%) like the program to some extent. It is interesting to note that male teachers are somewhat more likely to dislike the program and considerably more likely than female teachers or anyone else to dislike it very much.

When we look at table 19, we see a similar finding. Males (with the exception of male health coordinators) are somewhat more likely to choose the extreme categories, finding the incremental feature either "highly acceptable" or "highly unacceptable." This is particularly true of teachers where 40.2% of the males consider the incremental feature "highly acceptable" compared with only 12.5% of the females, and of principals, where 8.1% of the males but none of the females choose the "highly unacceptable" category. Overall, however, males (74.2%) are generally more accepting of the incremental feature than are females (64.0%), although this finding may be an artifact of the few fathers and male teachers interviewed. In view of the facts that in an estimated 42.6% of the households no spouse (read "male head of household") was present and that most elementary teachers are female (an estimated 84%), however, this tendency among females to be less accepting of the incremental feature may be important; female teachers, in particular, are over half again as likely as male teachers to be critical of the incremental feature. This difference is even more acute for health coordinators and superintendents, although the importance of their roles as key persons with respect to program operation must be balanced against the limited number of females, particularly females who disapprove of the incremental feature, in these groups and against their unanimous general approval of the overall program.

b. Race. Table 20 reveals no important differences between whites and blacks in their feelings about the overall program, again largely because everyone generally likes the program. With the exception of teachers, blacks tend to be more accepting of the incremental feature

## Table 18

### Comparison of Males' and Females' Feelings About Overall Program for Each Type of Respondent

| Feelings about Overall Program | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Males | Females | Males | Females | Males | Females | Males | Females | Males | Females |
| Liked it very much | 42.3 % | 61.2 % | 62.2 % | 53.1 % | 64.8 % | 55.1 % | 100.0 % | 100.0 % | 72.2 % | 100.0 % |
| *Std. Error* | *13.4* | *2.9* | *7.8* | *4.4* | *8.4* | *26.0* | | | | |
| Liked it | 51.5 | 35.1 | 31.4 | 43.4 | 34.0 | 44.9 | - | - | 27.8 | - |
| *Std. Error* | *13.7* | *3.0* | *5.9* | *4.5* | *8.1* | *26.0* | | | | |
| Didn't care one way or the other | 6.2 | 2.3 | - | 1.3 | 1.2 | - | - | - | - | - |
| *Std. Error* | *5.9* | *0.6* | | *0.6* | *1.3* | | | | | |
| Disliked it | - | 1.4 | - | 2.0 | - | - | - | - | - | - |
| *Std. Error* | | *0.6* | | *0.4* | | | | | | |
| Disliked it very much | - | - | 6.4 | 0.1 | - | - | - | - | - | - |
| *Std. Error* | | | *2.4* | *0.0* | | | | | | |
| Totals | 100.0 % | 100.0 % | 100.0 % | 100* % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (184) | (4002) | (271) | (1442) | (121) | (35) | 3 | 4 | 18 | 1 |

*Column total does not equal 100.0% because of rounding

## Table 19

### Comparison of Males' and Females' Attitudes About Incremental Feature for Each Type of Respondent

| Attitudes about Incremental Feature | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Males | Females | Males | Females | Males | Females | Males | Females | Males | Females |
| Highly Acceptable | 11.6 % | 10.1 % | 40.2 % | 12.5 % | 6.0 % | 2.2 % | - | 75.0 % | 33.3 % | - |
| *Std. Error* | *4.6* | *2.3* | *19.2* | *2.4* | *3.2* | *2.4* | | | | |
| Acceptable | 58.1 | 53.4 | 39.0 | 52.9 | 61.5 | 61.5 | 100.0 % | - | 50.0 | - |
| *Std. Error* | *12.6* | *2.9* | *17.2* | *5.1* | *8.7* | *25.3* | | | | |
| Unacceptable | 25.2 | 33.2 | 17.4 | 32.3 | 24.4 | 36.3 | - | 25.0 | 16.7 | 100.0 % |
| *Std. Error* | *11.5* | *2.7* | *2.4* | *3.6* | *7.3* | *25.4* | | | | |
| Highly Unacceptable | 5.1 | 3.3 | 3.4 | 2.4 | 8.1 | - | - | - | - | - |
| *Std. Error* | *4.9* | *0.8* | *1.3* | *1.0* | *7.7* | | | | | |
| Totals | 100.0 % | 100.0 % | 100.0 % | 100* % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (184) | (3952) | (271) | (1447) | (121) | (35) | 3 | 4 | 18 | 1 |

---

*Column total does not equal 100.0% because of rounding.

## Table 20

### Feelings About Overall Program Among Whites and Blacks for each Type of Respondent

| Feelings about Overall Program | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | White | Black | White | Black | White | Black | White | Black | White | Black |
| Liked it very much | 56.7 % | 65.9 % | 51.6 % | 74.7 % | 60.6 % | 81.5 % | 100.0 % | 100.0 % | 73.7 % | - |
| *Std. Error* | *4.5* | *3.7* | *5.6* | *3.3* | *8.5* | *8.4* | | | | |
| Liked it | 38.5 | 32.0 | 44.4 | 22.1 | 39.4 | 8.9 | - | - | 26.3 | - |
| *Std. Error* | *4.6* | *3.7* | *5.2* | *3.3* | *8.5* | *1.7* | | | | |
| Didn't care one way or the other | 2.6 | 2.1 | 1.3 | - | - | 9.6 | - | - | - | - |
| *Std. Error* | *0.9* | *1.0* | *0.6* | | | *8.8* | | | | |
| Disliked it | 2.2 | - | 1.5 | 3.2 | - | - | - | - | - | - |
| *Std. Error* | *1.0* | | *0.4* | *0.2* | | | | | | |
| Disliked it very much | - | - | 1.3 | - | - | - | - | - | - | - |
| *Std. Error* | | | *0.2* | | | | | | | |
| Totals | 100.0 % | 100.0 % | 100* % | 100.0 % | 100* % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | - |
| Total (estimated) number of cases | (2497) | (1689) | (1490) | (223) | (141) | (15) | 6 | 1 | 19 | 0 |

---

*Column total does not equal 100.0% because of rounding.

of the program (see table 21); and for the teachers, the greater tendency of blacks to find the feature unacceptable is neither pronounced nor does it result in more extreme judgments. On the other hand, white principals, though no more likely than any grouping of parents or teachers to disapprove of the incremental method of program operation, are five times more likely than their black educational peers to consider the incremental feature unacceptable. Again, health coordinators and superintendents tend to be more accepting than any other groups.

c. Urban-Rural Location. With respect to feelings about the overall program, an interesting pattern is evident in table 22. With the exceptions of superintendents, where the pattern is reversed, and of health coordinators, where there is no difference, persons who like the program but live in rural counties tend to like the overall program less. Rural parents, teachers, and principals choose the extreme positive category only about two-thirds as often as do their urban counterparts. Rural parents and teachers are also considerably more likely than urban parents and teachers to express no opinion or to dislike the overall program. This finding is somewhat unexpected in view of the dental care that the Chattanooga Project made available to rural areas that had no resident dentists.

During the pilot study, however, there was some indication that, rather than being content with the delivery of care through the children's incremental dental care program, persons in rural areas were reminded of and dissatisfied about their lack of resident dentists; the program thus served as a reminder of the irritating fact that all residents, not just children, in the area should have dental care readily available. In this sense, then, table 22 reflects more a desire for resident practitioners than a negative view of the Chattanooga Project, since only slightly fewer persons in rural areas (93.0%) generally approved of the program than did persons in urban locations (98.4%). In addition, this difference in general liking may result from the timing of this study rather than from some difference in conditions or program operations between urban and rural counties.

Recalling that the Chattanooga Project formally ended in early 1974 and that services rendered during the 1975-76 school year were drastically curtailed, the results were felt most acutely in rural areas. In

## Table 21

### Attitudes About Incremental Feature Among Whites and Blacks for Each Type of Respondent

| Attitudes about Incremental Feature | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | White | Black | White | Black | White | Black | White | Black | White | Black |
| Highly Acceptable | 9.4 % | 11.5 % | 17.9 % | 9.9 % | 5.1 % | 5.1 % | 33.3 % | 100.0 % | 31.6 % | - |
| *Std. Error* | *2.7* | *3.4* | *4.2* | *2.6* | *2.8* | *5.0* | | | | |
| Acceptable | 53.5 | 53.8 | 50.4 | 52.5 | 58.8 | 87.6 | 50.0 | - | 47.4 | - |
| *Std. Error* | *3.8* | *5.0* | *2.8* | *4.2* | *10.0* | *5.0* | | | | |
| Unacceptable | 35.2 | 29.3 | 29.2 | 35.2 | 29.2 | 7.3 | 16.7 | - | 21.1 | - |
| *Std. Error* | *3.3* | *5.2* | *4.7* | *2.9* | *9.1* | *1.4* | | | | |
| Highly Unacceptable | 2.0 | 5.5 | 2.6 | 2.4 | 6.9 | - | - | - | - | - |
| *Std. Error* | *0.5* | *1.8* | *0.8* | *2.3* | *6.6* | | | | | |
| Totals | 100* % | 100* % | 100* % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100* % | - |
| Total (estimated) number of cases | (2481) | (1656) | (1495) | (223) | (141) | (15) | 6 | 1 | 19 | 0 |

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*Column totals do not equal 100.0% because of rounding.

## Table 22

### Feelings About Overall Program Among Persons in Urban or Rural Counties for Each Type of Respondent

| Feelings about Overall Program | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural |
| Liked it very much | 67.9 % | 48.5 % | 63.7 % | 39.2 % | 73.9 % | 52.2 % | 100.0 % | 100.0 % | 60.0 % | 76.9 % |
| *Std. Error* | *3.3* | *5.7* | *4.8* | *6.7* | *12.2* | *10.1* | | | | |
| Liked it | 30.5 | 44.3 | 34.7 | 52.9 | 24.2 | 47.8 | - | - | 40.0 | 23.1 |
| *Std. Error* | *3.1* | *6.2* | *4.6* | *7.0* | *11.7* | *10.1* | | | | |
| Didn't care one way or the other | 1.6 | 3.8 | 0.3 | 2.5 | 1.9 | - | - | - | - | - |
| *Std. Error* | *0.7* | *1.2* | *0.2* | *1.3* | *2.1* | | | | | |
| Disliked it | - | 3.4 | 1.2 | 2.4 | - | - | - | - | - | - |
| *Std. Error* | | *1.6* | *0.2* | *0.8* | | | | | | |
| Disliked it very much | - | - | - | 3.0 | - | - | - | - | - | - |
| *Std. Error* | | | | *0.4* | | | | | | |
| Totals | 100.0 % | 100.0 % | 100* % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (2570) | (1616) | (1074) | (640) | (75) | (81) | 4 | 3 | 5 | 13 |

---

*Column total does not equal 100.0% because of rounding.

Chattanooga and Hamilton County, dental care through an earlier established program in the local health department continued to be available for families covered by Medicaid. Since the majority of this study's urban residents live in Hamilton County and since most of the Hamilton County parents are eligible for Medicaid with their children regularly receiving dental care through a cooperative arrangement between the health department and the school systems, it may be that these urban parents, teachers, and principals perceive little change, as though the program had continued. Hence, the slight difference between urban and rural groups in feelings about the overall program may only reflect recognition of and dislike for program cessation among persons in rural areas.

Urban residents tend also to be more accepting of the incremental feature of the program, as can be seen in table 23. When one compares the urban and rural proportions choosing the extreme positive response, urban residents are more accepting; and, except for principals, when the proportions of persons in urban and rural counties generally accepting the feature are compared, the same pattern is evident. Eleven percent more urban than rural principals consider the incremental feature somehow unacceptable, and that difference results essentially from an unmatched tendency by disapproving urban principals to view the feature as "highly unacceptable." While the general pattern in table 23 is similar to that found for feelings about the overall program and can probably be interpreted similarly, this reversal of the pattern among principals is an anomaly. The greater general acceptance among all urban residents (72.3%) than among all rural residents (57.6%) may arise as a variation on the explanation above for persons in rural areas liking the overall program less. That is, the program's delivery of dental services to rural areas points up their lack of permanent services; but once the obviously costly arrangements are made to "import" dental treatment on a temporary basis, rural residents may question the necessity of limiting receipt of the care on what may be considered a trivial basis. (There is, as a matter of fact, some evidence from the pilot study and interviewers' notes that in the most remote areas this reasoning, officially or unofficially, resulted in many children whose grades were not yet covered receiving care.)

## Table 23

### Attitudes About Incremental Feature Among Persons in Urban or Rural Counties for Each Type of Respondent

| Attitudes about Incremental Feature | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural | Urban | Rural |
| Highly Acceptable | 14.8 % | 2.9 % | 25.9 % | 1.8 % | 8.0 % | 2.4 % | 75.0 % | - | 40.0 % | 30.8 % |
| *Std. Error* | *3.4* | *2.1* | *4.7* | *1.5* | *4.7* | *2.5* | | | | |
| Acceptable | 53.7 | 53.5 | 47.0 | 56.7 | 53.1 | 69.4 | 25.0 | 66.7 % | 40.0 | 46.2 |
| *Std. Error* | *4.2* | *3.4* | *1.6* | *7.2* | *12.0* | *13.4* | | | | |
| Unacceptable | 27.1 | 41.9 | 26.5 | 35.7 | 26.0 | 28.2 | - | 33.3 | 20.0 | 23.1 |
| *Std. Error* | *3.9* | *3.1* | *5.2* | *6.2* | *10.4* | *13.3* | | | | |
| Highly Unacceptable | 4.4 | 1.7 | 0.6 | 5.8 | 12.9 | - | - | - | - | - |
| *Std. Error* | *1.3* | *0.5* | *0.6* | *1.5* | *11.9* | | | | | |
| Totals | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100* % |
| Total (estimated) number of cases | (2537) | (1600) | (1074) | (644) | (75) | (81) | 4 | 3 | 5 | 13 |

*Column total does not equal 100.0% because of rounding.

d. Family Size. Since in larger families both the need for dental care is likely to be greater and fewer resources are likely to be available to pay for treatment than in smaller families, the possibility that parents' feelings about the program and acceptance of the incremental feature might also differ is examined in tables 24 and 25. It is apparent from table 24 that feelings about the overall program do not vary with family size, although parents in the largest households (7-14) are consistently though only slightly less favorable toward the program (when compared with the proportions for all family sizes combined).

Attitudes toward the incremental feature also do not generally seem to vary with family size, owing primarily to the unsystematic fluctuations in the two middle acceptance categories around the totals for all family sizes combined and to the relatively large proportions across these two rows. On the other hand, there does seem to be a slight tendency for parents in smaller households to be more highly accepting and for parents in larger households to be more highly unaccepting of the incremental feature. That is, the expectation stated above is roughly and weakly supported, at least among parents who take an extreme position on the question, although the importance of this finding is probably slight in view of the overall lack of effect of family size on attitudinal acceptance or nonacceptance.

### 2. Program- and School-Related Subgroups

Having found that there is little, if any, difference in feelings about the overall program and attitudes toward the incremental feature among subgroups defined demographically, certain characteristics of the Chattanooga Project or of the schools through which the program gained access to the children need to be examined for their effects on attitudinal acceptance. Acceptance is therefore described below for groups to whom dental care was delivered by different methods, for parents whose children were in the study sample and differed in the extent of treatment received through the program, for groups who think that participation in the program results in the children being looked down on, and for school officials with different proportions of their classes or schools enrolled in the program and with different opinions about interference with educational activities caused by program operations.

### Table 24

### Feelings About Overall Program Among Parents by Categories of Size of Household

| Feelings About Overall Program | Number of Persons in Household | | | | | |
|---|---|---|---|---|---|---|
| | 2-3 | 4 | 5 | 6 | 7-14 | Total |
| Liked it very much | 65.0 % | 57.2 % | 57.9 % | 65.7 % | 58.5 % | 60.4 % |
| *Std. Error* | *8.0* | *5.7* | *4.8* | *6.2* | *4.8* | *3.0* |
| Liked it | 32.7 | 40.9 | 37.2 | 34.3 | 33.2 | 35.8 |
| *Std. Error* | *8.3* | *5.4* | *5.2* | *6.2* | *4.9* | *3.1* |
| Didn't care one way or the other | 2.3 | - | 3.2 | - | 6.0 | 2.4 |
| *Std. Error* | *2.2* | | *1.3* | | *2.1* | *0.7* |
| Disliked it | - | 1.9 | 1.7 | - | 2.4 | 1.3 |
| *Std. Error* | | *1.9* | *1.7* | | *0.6* | *0.6* |
| Disliked it very much | - | - | - | - | - | - |
| Totals | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100* % | 100* % |
| Total (estimated) number of cases | (573) | (809) | (1051) | (833) | (919) | (4186) |

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*Column totals do not equal 100.0% because of rounding.

Table 25

Attitudes About Incremental Feature Among Parents by Categories of Size of Household

| Attitudes About Incremental Feature | Number of Persons in Household | | | | | |
|---|---|---|---|---|---|---|
| | 2-3 | 4 | 5 | 6 | 7-14 | Total |
| Highly Acceptable | 17.1 % | 8.6 % | 9.3 % | 12.4 % | 6.2 % | 10.2 % |
| *Std. Error* | *6.8* | *4.2* | *3.4* | *3.4* | *2.2* | *2.3* |
| Acceptable | 48.0 | 57.5 | 51.8 | 59.3 | 50.8 | 53.6 |
| *Std. Error* | *8.5* | *6.2* | *6.2* | *5.3* | *5.0* | *2.9* |
| Unacceptable | 33.8 | 30.7 | 35.4 | 24.2 | 38.9 | 32.8 |
| *Std. Error* | *8.3* | *5.1* | *5.3* | *4.9* | *5.3* | *2.6* |
| Highly Unacceptable | 1.1 | 3.2 | 3.4 | 4.1 | 4.1 | 3.4 |
| *Std. Error* | *1.1* | *2.4* | *1.3* | *1.7* | *2.0* | *0.8* |
| Totals | 100.0 % | 100.0 % | 100* % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (573) | (770) | (1066) | (833) | (895) | (4137) |

*Column total does not equal 100.0% because of rounding.

a. Mode of Dental Care Delivery. As discussed in Chapter I, the Chattanooga Project encountered the necessity to adapt its system for the delivery of care to local conditions, depending primarily on the availability of private practitioners or local dental care facilities. Tables 26 through 28 present feelings about the overall program for parents, teachers, and principals, respectively, categorized by the types of delivery systems used.[5/] Again, the most striking finding shown in these tables is the overwhelmingly favorable view of the program. For no group, regardless of relationship to the program or mode of dental care delivery, is the proportion of those who at least moderately like the program less than 83.0% (teachers in schools served by combinations of the three delivery modes). Also, for all three groups, the consistently most favorable view of the program is held by persons whose children or students were treated exclusively by private practitioners, based on the estimated proportions for the "liked it very much" category. General liking, based on both the favorable categories, is equally as great among those served by fixed clinics, however, as it is for the private practice groups. Persons served by the mobile vans are also about as likely to express general liking for the program, but they are much less likely than persons served by either fixed clinics or private practitioners to be favorable in the extreme and, with the exception of principals, they are much more likely to dislike the program. The feelings of persons served by combinations of delivery systems seem very similar to those found in the mobile van group, and logically so, since many of the combinations of modes of care delivery included the use of mobile vans.

The reasons for these differences in feelings about the program between persons served by mobile vans or combinations of delivery systems and those served by fixed clinics or private practitioners seem to be related, not so much to the delivery systems themselves, as to the earlier discussed differences between residents of urban and rural counties. As can be seen in table 29,[6/] the differences in feelings

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[5/] Superintendents and health coordinators are not considered here since, in so many instances, combinations of the delivery systems were used across school districts.

[6/] Since patterns of responses for parents, teachers, and principals in tables 26-28 are so similar, estimates based on all three groups combined are presented in table 29.

### Table 26

### Parents' Feelings About Overall Program by Mode of Dental Service Delivery System

| | Fixed Clinic | Mobile Van | Private Practice | Combination | Total |
|---|---|---|---|---|---|
| Liked it very much | 64.4% | 48.3% | 70.7% | 48.6% | 60.4% |
| *Std. Error* | *4.7* | *6.4* | *5.2* | *10.8* | *3.0* |
| Liked it | 34.4 | 42.5 | 27.1 | 47.3 | 35.8 |
| *Std. Error* | *4.6* | *7.6* | *4.3* | *11.7* | *3.1* |
| Didn't care one way or the other | 1.2 | 4.3 | 1.8 | 4.2 | 2.4 |
| *Std. Error* | *0.6* | *1.8* | *1.2* | *2.9* | *0.7* |
| Disliked it | - | 4.9 | 0.4 | - | 1.3 |
| *Std. Error* | | *2.4* | *0.4* | | *0.6* |
| Disliked it very much | - | - | - | - | - |
| Total | 100.0% | 100.0% | 100.0% | 100* % | 100* % |
| Total (estimated) number of cases | (1637) | (1035) | (1079) | (435) | (4186) |

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[*] Column totals do not equal 100.0% because of rounding.

## Table 27

## Teachers' Feelings About Overall Program by Mode of Dental Service Delivery System

| | Fixed Clinic | Mobile Van | Private Practice | Combination | Total |
|---|---|---|---|---|---|
| Liked it very much | 60.6% | 33.9% | 66.5% | 36.4% | 54.6% |
| *Std. Error* | *3.8* | *5.0* | *7.9* | *5.7* | *4.6* |
| Liked it | 34.7 | 60.9 | 33.3 | 46.6 | 41.5 |
| *Std. Error* | *3.7* | *5.8* | *7.9* | *3.9* | *4.4* |
| Didn't care one way or the other | 2.9 | - | - | 5.6 | 1.1 |
| *Std. Error* | *0.8* | | | *5.0* | *0.5* |
| Disliked it | 1.9 | 4.7 | 0.3 | - | 1.7 |
| *Std. Error* | *0.2* | *1.2* | *0.1* | | *0.3* |
| Disliked it very much | - | 0.5 | - | 11.5 | 1.1 |
| *Std. Error* | | *0.0* | | *1.2* | *0.2* |
| Total | 100* % | 100.0% | 100* % | 100* % | 100.0% |
| Total (estimated) number of cases | (375) | (419) | (769) | (150) | (1713) |

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*Column totals do not equal 100.0% because of rounding.

### Table 28

### Principals' Feelings About Overall Program by Mode of Dental Service Delivery System

| | Fixed Clinic | Mobile Van | Private Practice | Combination | Total |
|---|---|---|---|---|---|
| Liked it very much | 65.6% | 24.5% | 94.9% | 55.0% | 62.6% |
| *Std. Error* | *12.2* | *10.7* | *4.3* | *6.0* | *7.9* |
| Liked it | 34.4 | 75.5 | 2.7 | 45.0 | 36.4 |
| *Std. Error* | *12.2* | *10.7* | *2.9* | *6.0* | *7.6* |
| Didn't care one way or the other | - | - | 2.4 | - | 0.9 |
| *Std. Error* | | | *2.7* | | *1.0* |
| Disliked it | - | - | - | - | - |
| Disliked it very much | - | - | - | - | - |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100* % |
| Total (estimated) number of cases | (33) | (52) | (61) | (11) | (157) |

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*Column total does not equal 100.0% because of rounding.

## Table 29

### Feelings About Overall Program Among Parents, Teachers, and Principals (Combined) by Mode of Dental Service Delivery Systems, Controlling for Residence in Urban or Rural Counties

| | URBAN | | | | RURAL | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| | Fixed Clinic | Mobile Van | Private Practice | Combination | Fixed Clinic | Mobile Van | Private Practice | Combination | |
| Liked it very much | 65.0 % | 60.3 % | 75.0 % | 54.0 % | 56.1 % | 37.7 % | 60.1 % | 33.6 % | 58.8 % |
| *Std. Error* | *3.4* | *4.4* | *5.6* | *8.7* | *22.7* | *6.4* | *3.9* | *11.4* | *2.6* |
| Liked it | 33.7 | 38.1 | 23.3 | 43.2 | 38.7 | 52.4 | 38.9 | 52.6 | 37.5 |
| *Std. Error* | *3.2* | *4.2* | *4.6* | *10.3* | *22.6* | *8.0* | *3.8* | *12.2* | *2.6* |
| Didn't care one way or the other | 0.9 | - | 1.7 | 2.8 | 5.1 | 4.0 | - | 6.8 | 2.0 |
| | *0.6* | | *1.1* | *2.7* | *0.1* | *1.7* | | *0.9* | *0.4* |
| Disliked it | 0.4 | 1.6 | - | - | - | 5.7 | 1.0 | - | 1.4 |
| *Std. Error* | *0.0* | *0.2* | | | | *2.3* | *0.6* | | *0.4* |
| Disliked it very much | - | - | - | - | - | 0.2 | - | 7.0 | 0.3 |
| *Std. Error* | | | | | | *0.0* | | *1.0* | *0.0* |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100* % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (1744) | (386) | (1238) | (351) | (302) | (1119) | (671) | (245) | (6056) |

---

*Column total does not equal 100.0% because of rounding.

between delivery systems are not quite as pronounced for urban residents and the proportions liking the program very much virtually equal or exceed the combined total proportion for that row category. Residents of urban areas served by the mobile vans much more often say they like the program very much and much less often express dislike; this finding and the results for combinations of systems in urban counties should further be qualified by the fact that most of these people's schools, even in Hamilton County, were located in areas equally or more remote than any classified here as rural. This is not to say that the vans, singly or in combination with other modes of care delivery, had nothing to do with less favorable feelings about the program, however. It is probable that their arrival and presence in the schoolyard served as the stimulus which made conscious that desire discussed earlier to have "our own dentists," particularly since during the pilot study and interviewing no serious dissatisfaction with the facilities or quality of care were ever indicated (only the youthfulness of the dentsits manning the vans was mentioned, and that not often). Also, when we observe the redistribution in table 29 of feelings about the overall program from the extreme liking category to the moderate liking category for all delivery system groups in rural counties, this interpretation based on rurality (actually, on the absence of local practitioners) is further supported.

The general pattern for feelings about the program persists in table 30-32 for attitudes about the incremental feature among parents, teachers, and principals served by different modes of care delivery, but the differences are much less acute. In addition, there are some interesting exceptions to that pattern. For example, all persons served by combinations of delivery systems are more accepting overall of the incremental feature than are any persons served by any single mode of care delivery and no one in this group served by more than one delivery system finds the feature highly unacceptable. Persons served by the mobile vans are less likely to consider the incremental nature of the program highly acceptable (except for teachers, where the differences between three modes of care delivery groups are small), and only parents whose children are served by vans are more likely to find this aspect of the program generally unacceptable. The more favorable view of the program by persons served by private practitioners is apparent in attitudes about the incremental feature as well, although much less so; and principals who find the incremental feature unacceptable deviate sharply from the pattern.

## Table 30

## Parents' Attitudes About Incremental Feature by Mode of Dental Service Delivery System

| | Fixed Clinic | Mobile Van | Private Practice | Combination | Total |
|---|---|---|---|---|---|
| Highly Acceptable | 11.6% | 4.4% | 13.2% | 11.5% | 10.2% |
| *Std. Error* | *3.9* | *2.6* | *5.8* | *4.6* | *2.3* |
| Acceptable | 53.6 | 52.9 | 52.2 | 58.8 | 53.6 |
| *Std. Error* | *5.1* | *6.9* | *4.7* | *4.4* | *2.9* |
| Unacceptable | 31.4 | 39.5 | 29.7 | 29.7 | 32.8 |
| *Std. Error* | *5.1* | *6.5* | *2.5* | *2.9* | *2.6* |
| Highly unacceptable | 3.4 | 3.2 | 5.0 | - | 3.4 |
| *Std. Error* | *1.4* | *1.2* | *2.1* | | *0.8* |
| Total | 100.0% | 100.0% | 100* % | 100.0% | 100.0% |
| Total (estimated) number of cases | (1600) | (1028) | (1073) | (435) | (4136) |

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*Column total does not equal 100.0% because of rounding.

## Table 31

### Teachers' Attitudes About Incremental Feature by Mode of Dental Service Delivery System

| | Fixed Clinic | Mobile Van | Private Practice | Combination | Total |
|---|---|---|---|---|---|
| Highly Acceptable | 5.6% | 8.9% | 28.6% | 7.4% | 16.8% |
| *Std. Error* | *1.2* | *5.5* | *5.5* | *2.3* | *3.9* |
| Acceptable | 58.1 | 59.1 | 40.0 | 63.1 | 50.7 |
| *Std. Error* | *4.1* | *2.9* | *5.4* | *6.1* | *2.7* |
| Unacceptable | 36.0 | 25.9 | 29.3 | 29.5 | 29.9 |
| *Std. Error* | *4.5* | *8.6* | *7.9* | *4.1* | *4.3* |
| Highly unacceptable | 0.3 | 6.1 | 2.2 | - | 2.6 |
| *Std. Error* | *0.3* | *1.2* | *1.9* | | *0.9* |
| Total | 100.0% | 100.0% | 100* % | 100.0% | 100.0% |
| Total (estimated) number of cases | (375) | (423) | (769) | (150) | (1717) |

---

[*] Column total does not equal 100.0% because of rounding.

## Table 32

## Principals' Attitudes About Incremental Feature by Mode of Dental Service Delivery System

| | Fixed Clinic | Mobile Van | Private Practice | Combination | Total |
|---|---|---|---|---|---|
| Highly Acceptable | 7.8% | 3.8% | 5.7% | - | 5.1% |
| *Std. Error* | *2.6* | *3.9* | *5.7* | | *2.6* |
| Acceptable | 72.6 | 59.6 | 50.5 | 100.0% | 61.5 |
| *Std. Error* | *11.3* | *21.1* | *12.7* | *0.0* | *9.3* |
| Unacceptable | 19.6 | 17.8 | 43.9 | - | 27.1 |
| *Std. Error* | *11.5* | *11.9* | *14.4* | | *8.5* |
| Highly unacceptable | - | 18.8 | - | - | 6.2 |
| *Std. Error* | | *16.9* | | | *6.0* |
| Total | 100.0% | 100.0% | 100* % | 100.0% | 100* % |
| Total (estimated) number of cases | (33) | (52) | (61) | (11) | (157) |

---

*Column totals do not equal 100.0% because of rounding.

Inspection of table 33 where attitudes about the incremental feature among groups served by different delivery systems is controlled for residence in urban or rural counties indicates that earlier interpretations are not applicable since results are much more mixed. In urban counties, general acceptance of the feature is highest for persons served by private practitioners or combinations of delivery systems, while in rural areas, persons served by these two modes of care are least accepting of the incremental feature. Since no other information we have bears on these findings, it may mean that attitudes about a specific aspect of the program like the incremental feature are not necessarily systematically influenced by other program conditions.

b. Other Program- and School-Related Subgroups. To this point, we have presented descriptions of feelings about the overall program and attitudes toward the incremental feature for various subgroups and discussed the results separately for each subgrouping characteristic. A summarization of the results thus far is that almost all persons in any of these subgroups generally like the program and a majority of the people in these subgroups find the incremental feature at least minimally acceptable. Some tabulations will now be presented for additional subgroups but, since the overall results are consistent with earlier presentations, discussion will be kept to a minimum.

Tables 34 and 35 show feelings and attitudes among parents whose sample children received varying amounts of dental treatment, operationalized by summing the number of procedures a sample child underwent, exclusive of examinations, x-rays, and prophylaxis. Feelings about the overall program are again consistently favorable and little different in every category of the dental treatment extensiveness score. Acceptance of the incremental feature is also consistent with earlier findings, although parents whose sample children received more treatment tend to be less accepting of this aspect of the program.

Perhaps the most revealing finding in tables 36 and 37 is that virtually no one believes that participation in the children's incremental dental care program results in the children being looked down on by anyone else in the schools. The few parents and principals who do perceive that some stigma is associated with program participation are less enthusiastic about the program, but still generally approving.

## Table 33

### Attitudes About Incremental Feature Among Parents, Teachers, and Principals (Combined) by Mode of Dental Service Delivery System, Controlling for Residence in Urban or Rural Counties

| | URBAN | | | | RURAL | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| | Fixed Clinic | Mobile Van | Private Practice | Combination | Fixed Clinic | Mobile Van | Private Practice | Combination | |
| Highly Acceptable | 10.3 % | 20.7 % | 28.4 % | 15.0 % | 11.2 % | 0.4 % | 2.0 % | 3.4 % | 12.0 % |
| *Std. Error* | *3.3* | *9.1* | *5.6* | *5.7* | *10.9* | *0.3* | *1.5* | *2.5* | *2.0* |
| Acceptable | 54.5 | 33.4 | 45.3 | 81.3 | 56.4 | 62.3 | 50.6 | 31.1 | 53.0 |
| *Std. Error* | *5.0* | *14.9* | *3.7* | *4.0* | *8.3* | *3.5* | *7.2* | *5.3* | *2.2* |
| Unacceptable | 32.0 | 40.9 | 22.0 | 3.8 | 32.4 | 32.9 | 44.9 | 65.5 | 31.8 |
| *Std. Error* | *5.2* | *20.0* | *3.0* | *2.8* | *2.6* | *2.8* | *5.1* | *3.6* | *2.3* |
| Highly Unacceptable | 3.2 | 5.0 | 4.4 | - | - | 4.4 | 2.4 | - | 3.2 |
| *Std. Error* | *1.3* | *3.5* | *2.7* | | | *0.8* | *1.9* | | *0.7* |
| Total | 100.0 % | 100.0 % | 100* % | 100* % | 100.0 % | 100.0 % | 100* % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (1710) | (386) | (38) | (351) | (298) | (1117) | (665) | (245) | (6011) |

---

*Column totals do not equal 100.0% because of rounding.

## Table 34

## Feelings About Overall Program Among Parents by Categories of Sample Child's Dental Treatment Extensiveness Score

| Feelings About Overall Program | Dental Treatment Extensiveness Score for Sample Child | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1 | 2-3 | 4-6 | 7-15 | Total |
| Liked it very much | 57.0 % | 66.0 % | 60.1 % | 61.0 % | 59.2 % | 60.4 % |
| *Std. Error* | *5.1* | *5.5* | *4.9* | *5.3* | *8.0* | *3.0* |
| Liked it | 37.7 | 32.3 | 36.3 | 35.2 | 37.5 | 35.9 |
| *Std. Error* | *5.3* | *5.5* | *4.6* | *5.0* | *7.8* | *3.1* |
| Didn't care one way or the other | 3.9 | 1.7 | 2.1 | 1.4 | 2.6 | 2.4 |
| *Std. Error* | *1.4* | *1.7* | *1.5* | *0.9* | *1.4* | *0.7* |
| Disliked it | 1.5 | - | 1.5 | 2.3 | 0.8 | 1.3 |
| *Std. Error* | *1.5* | | *0.2* | *1.9* | *0.8* | *0.6* |
| Disliked it very much | - | - | - | - | - | - |
| Totals | 100* % | 100.0 % | 100.0 % | 100* % | 100* % | 100.0 % |
| Total (estimated) number of cases | (1170) | (768) | (953) | (851) | (444) | (4186) |

---

*Column totals do not equal 100.0% because of rounding.

## Table 35

### Attitudes About Incremental Feature Among Parents by Categories of Sample Child's Dental Treatment Extensiveness Score

| Attitudes About Incremental Feature | Dental Treatment Extensiveness Score for Sample Child | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1 | 2-3 | 4-6 | 7-15 | Total |
| Highly Acceptable | 8.0 % | 14.6 % | 13.9 % | 6.9 % | 6.7 % | 10.2 % |
| *Std. Error* | *3.1* | *4.5* | *4.8* | *3.6* | *4.6* | *2.3* |
| Acceptable | 60.7 | 52.4 | 52.1 | 49.9 | 47.3 | 53.6 |
| *Std. Error* | *5.0* | *6.1* | *5.8* | *5.9* | *8.6* | *2.9* |
| Unacceptable | 27.4 | 30.6 | 31.7 | 38.9 | 41.5 | 32.8 |
| *Std. Error* | *5.1* | *5.4* | *4.2* | *6.5* | *8.3* | *2.6* |
| Highly Unacceptable | 3.8 | 2.4 | 2.2 | 4.4 | 4.4 | 3.4 |
| *Std. Error* | *1.4* | *1.7* | *1.3* | *2.1* | *2.6* | *0.8* |
| Totals | 100* % | 100.0 % | 100* % | 100* % | 100* % | 100.0 % |
| Total (estimated) number of cases | (1164) | (762) | (927) | (844) | (440) | (4137) |

[*] Column totals do not equal 100.0% because of rounding.

## Table 36

### Feelings About Overall Program by Whether it is Believed that Stigma is Associated with Participation in the Dental Program, for Each Type of Respondent

| Feelings about Overall Program | Parents | | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
| Liked it very much | 47.6 % | 63.0 % | - | 54.1 % | - | 63.7 % | - | 100.0 % | - | 72.2 % |
| *Std. Error* | *16.0* | *2.9* | | *4.8* | | *8.0* | | | | |
| Liked it | 47.5 | 33.7 | - | 42.0 | 100.0 % | 35.4 | - | - | - | 27.8 |
| *Std. Error* | *16.2* | *2.9* | | *4.5* | *0.0* | *7.8* | | | | |
| Didn't care one way or the other | 4.9 | 2.3 | - | 1.1 | - | 0.9 | - | - | - | - |
| *Std. Error* | *4.9* | *0.7* | | *0.5* | | *1.0* | | | | |
| Disliked it | - | 1.0 | - | 1.6 | - | - | - | - | - | - |
| *Std. Error* | | *0.4* | | *0.3* | | | | | | |
| Disliked it very much | - | - | - | 1.1 | - | - | - | - | - | - |
| *Std. Error* | | | | *0.2* | | | | | | |
| Totals | 100.0 % | 100.0 % | - | 100* % | 100.0 % | 100.0 % | - | 100.0 % | - | 100.0 % |
| Total (estimated) number of cases | (95) | (3828) | 0 | (1693) | (2) | (154) | 0 | 7 | 0 | 18 |

---

*Column total does not equal 100.0% because of rounding.

## Table 37

### Attitudes About Incremental Feature by Whether it is Believed that Stigma is Associated With Participation in the Dental Program, for Each Type of Respondent

| Attitudes about Incremental Feature | Parents |  | Teachers |  | Principals |  | Health Coordinators |  | Superintendents |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
| Highly Acceptable | - | 9.6 % | - | 17.0 % | - | 5.2 % | - | 42.9 % | - | 27.8 % |
| *Std. Error* |  | *2.2* |  | *3.9* |  | *2.7* |  |  |  |  |
| Acceptable | 95.1 % | 53.2 | - | 50.1 | - | 61.9 | - | 42.9 | - | 50.0 |
| *Std. Error* | *4.9* | *3.0* |  | *2.9* |  | *9.5* |  |  |  |  |
| Unacceptable | 4.9 | 33.7 | - | 30.3 | 100.0 % | 26.5 | - | 14.3 | - | 22.2 |
| *Std. Error* | *4.9* | *2.7* |  | *4.4* | *0.0* | *8.6* |  |  |  |  |
| Highly Unacceptable | - | 3.5 | - | 2.6 | - | 6.3 | - | - | - | - |
| *Std. Error* |  | *1.0* |  | *0.9* |  | *6.1* |  |  |  |  |
| Totals | 100.0 % | 100.0 % | - | 100.0 % | 100.0 % | 100* % | - | 100* % | - | 100.0 % |
| Total (estimated) number of cases | (95) | (3802) | 0 | (1697) | (2) | (154) | 0 | 7 | 0 | 18 |

---

*Column totals do not equal 100.0% because of rounding.

Teachers with higher proportions of their classes enrolled in the program tend to like it more and to be more accepting of the incremental feature, though the differences are extremely slight and the patterns are not perfect (see tables 38 and 39). Regardless of the percentages of their classes receiving care through the program, teachers overwhelmingly like the program and no fewer than a healthy majority of them (at least 57% or more) find the way of extending coverage acceptable, an always significant finding since teachers are the most critical of the study's target groups. Comparable tabulations are presented in tables 40 and 41 for principals, health coordinators, and superintendents, based on these officials' estimates of the percentage of poverty families in either their schools or school systems. Somewhat unexpectedly, the weak pattern detected for teachers is stronger and reversed for these groups, except for principals' attitudes about the incremental feature. One reason for these findings with respect to feelings about the overall program may be that as the need for the program (measured by the proportion of low-income families in the organization) increases, the demands on the organization for such things as staff time and transportation increase and become a "cost" of having the program operate. On the other hand, acceptance of the incremental feature may be tempered among officials whose schools or systems have more eligible families because they seem to feel that older children with more obvious dental problems are the most appropriate recipients of the care, or at least ought to be included, since the marginal costs to the schools are small once the already required extra efforts have been made.

Another school-related issue is addressed in tables 42 and 43 where feelings and attitudes of school officials, who claim it disrupted the class when the children departed for and returned from their dental appointments, are compared with those of their peers who perceive no interference. Like the earlier tabulations for perceptions of stigma, these tables reveal that only a small minority of school officials claim that any disturbance occurs. Interestingly enough, larger proportions of the few teachers, principals and superintendents, who assert that class disruption does occur, generally like the overall program but tend to be less accepting

## Table 38

### Feelings About Overall Program Among Teachers by Percentage of 1974-75 Class Receiving Care Through Dental Program

| Feelings About Overall Program | Percentage of 1974-75 Class in Dental Program | | | | |
|---|---|---|---|---|---|
| | 0-25% | 26-50% | 51-75% | 76-100% | Total |
| Liked it very much | 58.7 % | 50.4 % | 71.4 % | 84.3 % | 57.6 % |
| *Std. Error* | *5.9* | *6.7* | *9.2* | *13.4* | *4.8* |
| Liked it | 36.3 | 46.6 | 28.6 | 15.7 | 38.0 |
| *Std. Error* | *5.4* | *6.6* | *9.2* | *13.4* | *4.6* |
| Didn't care one way or the other | 1.5 | 0.3 | - | - | 1.2 |
| *Std. Error* | *0.8* | *0.3* | | | *0.6* |
| Disliked it | 2.0 | 2.2 | - | - | 1.9 |
| *Std. Error* | *0.5* | *0.2* | | | *0.4* |
| Disliked it very much | 1.5 | 0.6 | - | - | 1.3 |
| *Std. Error* | *0.3* | *0.1* | | | *0.2* |
| Totals | 100.0 % | 100* % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (1119) | (329) | (58) | (15) | (1521) |

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*Column total does not equal 100.0% because of rounding.

## Table 39

## Attitudes About Incremental Feature Among Teachers by Percentage of 1974-75 Class Receiving Care Through Dental Program

| Attitudes About Incremental Feature | Percentage of 1974-75 Class in Dental Program | | | | |
|---|---|---|---|---|---|
| | 0-25% | 26-50% | 51-75% | 76-100% | Total |
| Highly Acceptable | 14.9 % | 16.1 % | 16.1 % | 37.7 % | 15.4 % |
| *Std. Error* | *6.5* | *6.7* | *13.7* | *11.1* | *5.0* |
| Acceptable | 52.8 | 40.8 | 51.6 | 62.3 | 50.2 |
| *Std. Error* | *3.6* | *7.5* | *11.3* | *11.1* | *3.1* |
| Unacceptable | 29.0 | 41.1 | 32.3 | - | 31.5 |
| *Std. Error* | *5.8* | *5.6* | *7.3* | | *4.7* |
| Highly Unacceptable | 3.3 | 2.0 | - | - | 2.9 |
| *Std. Error* | *1.6* | *1.7* | | | *1.0* |
| Totals | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (1123) | (329) | (58) | (15) | (1525) |

## Table 40

## Feelings About Overall Program Among School Administrators by Proportion of Poverty Families in School or School District

| Feelings About Overall Program | Respondents' Estimates of Proportion of All Families in School or School District that were Poverty Families During 1974-75 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Principals | | | Health Coordinators | | Superintendents | |
| | 0-25% | 26-50% | 51-100% | 0-25% | 26-50% | 0-25% | 26-50% |
| Liked it very much | 68.5% | 60.0% | 58.1% | 100.0% | 100.0% | 88.9% | 55.6% |
| *Std. Error* | *16.5* | *17.3* | *11.5* | | | | |
| Liked it | 31.5 | 37.0 | 41.9 | - | - | 11.1 | 44.4 |
| *Std. Error* | *16.5* | *18.1* | *11.5* | | | | |
| Didn't care one way or the other | - | 3.0 | - | - | - | - | - |
| *Std. Error* | | *3.1* | | | | | |
| Disliked it | - | - | - | - | - | - | - |
| Disliked it very much | - | - | - | - | - | - | - |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Total (estimated) number of cases | (59) | (48) | (49) | 4 | 3 | 9 | 9 |

## Table 41

### Attitudes About Incremental Feature Among School Administrators by Proportion of Poverty Families in School or School District

| Attitudes About Incremental Feature | Respondents' Estimates of Proportion of All Families in School or School District that were Poverty Families During 1974-75 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Principals | | | Health Coordinators | | Superintendents | |
| | 0-25% | 26-50% | 51-100% | 0-25% | 26-50% | 0-25% | 26-50% |
| Highly Acceptable | - | 15.2% | 1.6% | 50.0% | 33.3% | 33.3% | 33.3% |
| *Std. Error* | | *8.8* | *1.6* | | | | |
| Acceptable | 38.0% | 67.3 | 84.4 | 50.0 | 33.3 | 55.6 | 44.4 |
| *Std. Error* | *15.7* | *10.6* | *5.9* | | | | |
| Unacceptable | 45.6 | 17.5 | 14.0 | - | 33.3 | [illegible].1 | 22.2 |
| *Std. Error* | *16.6* | *8.3* | *5.6* | | | | |
| Highly unacceptable | 16.4 | - | - | - | - | - | - |
| *Std. Error* | *15.4* | | | | | | |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100* % |
| Total (estimated) number of cases | (59) | (48) | (49) | 4 | 3 | 9 | 9 |

*Column totals do not equal 100.0% because of rounding.

## Table 42

### Feelings About Overall Program by Effects on Class Order of Children's Leaving for or Returning from Dental Treatment by Type of School Personel

| Feelings about Overall Program | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|
| | Disrupts Class | Does Not Disrupt | Disrupts Class | Does Not Disrupt | Disrupts Class | Does Not Disrupt | Disrupts Class | Does Not Disrupt |
| Liked it very much | 60.5 % | 52.8 % | 69.0 % | 59.2 % | 100.0 % | 100.0 % | 80.0 % | 63.6 % |
| *Std. Error* | *10.3* | *4.3* | *11.7* | *10.2* | | | | |
| Liked it | 32.0 | 44.4 | 28.3 | 40.8 | - | - | 20.0 | 36.4 |
| *Std. Error* | *8.9* | *4.3* | *10.6* | *10.2* | | | | |
| Didn't care one way or the other | 2.4 | 0.7 | 2.7 | - | - | - | - | - |
| *Std. Error* | *0.7* | *0.6* | *3.0* | | | | | |
| Disliked it | 4.6 | 0.8 | - | - | - | - | - | - |
| *Std. Error* | *1.1* | *0.4* | | | | | | |
| Disliked it very much | 0.5 | 1.3 | - | - | - | - | - | - |
| *Std. Error* | *0.1* | *0.1* | | | | | | |
| Totals | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (402) | (1312) | (54) | (102) | 1 | 6 | 5 | 11 |

## Table 43

### Attitudes About Incremental Feature by Effects on Class Order of Children's Leaving for or Returning from Dental Treatment by Type of School Personnel

| Feelings about Overall Program | Teachers | | Principals | | Health Coordinators | | Superintendents | |
|---|---|---|---|---|---|---|---|---|
| | Disrupts Class | Does Not Disrupt | Disrupts Class | Does Not Disrupt | Disrupts Class | Does Not Disrupt | Disrupts Class | Does Not Disrupt |
| Highly Acceptable | 24.7 % | 14.4 % | 3.6 % | 5.9 % | - | 50.0 % | - | 36.4 % |
| *Std. Error* | *17.3* | *2.5* | *3.6* | *3.5* | | | | |
| Acceptable | 35.8 | 55.2 | 59.3 | 62.7 | 100.0 % | 33.3 | 60.0 % | 54.5 |
| *Std. Error* | *9.2* | *4.4* | *12.7* | *12.4* | | | | |
| Unacceptable | 39.5 | 27.0 | 37.0 | 21.8 | - | 16.7 | 40.0 | 9.1 |
| *Std. Error* | *10.4* | *3.4* | *12.7* | *11.0* | | | | |
| Highly Unacceptable | - | 3.3 | - | 9.6 | - | - | - | - |
| *Std. Error* | | *1.1* | | *8.8* | | | | |
| Totals | 100.0 % | 100* % | 100* % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Total (estimated) number of cases | (402) | (1316) | (54) | (102) | 1 | 6 | 5 | 11 |

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*Column totals do not equal 100.0% because of rounding.

of the incremental feature than their counterparts who deny that classes are disrupted.

These results may be better understood in view of the most mentioned responses to the question of how class order was disturbed: that the teachers were not forewarned of children's scheduled appointments; that the disturbance was no greater than when children were called out for other reasons; and that any disruption was worth the benefits the children received. These suggest possible program accommodations, but, based on the insignificant amount of disapproval of the incremental feature, none of the above mentioned responses seem to be an obstacle to the continuation of the program.

## C. Identification of Factors Associated with Attitudinal Acceptance

The results presented thus far and findings from similar tabulations of acceptance for other subgroups (e.g., parents with different attitudes and practices with regard to dental care, whose sample children had been in the program for different lengths of time, and who had different proportions of their children excluded by the incremental feature) reveal that, first, there is very little variation in the criterion variables. Effectively, everyone likes the overall program and the majority of persons associated with the program accept the incremental feature. Secondly, while there are some differences in feelings and attitudes among subgroups (selected in anticipation that these differences would exist), they are minor and, more importantly, nonsystematic, especially with respect to attitudes toward the incremental feature. Generally, the results of the analysis so far have been that, knowing subgroup membership, we can slightly (and insignificantly in a substantive sense) better the chance of distinguishing persons who like the program very much from those who only moderately like it. With respect to attitudes about the incremental feature, knowing subgroup membership has so far slightly improved our chances of distinguishing only those who are highly accepting from those who consider the feature highly unacceptable; distinguishing between those who find the feature at all acceptable and those who find it unacceptable to any extent has not been effectively helped by knowing subgroup membership.

Two sources of this inability to discriminate along the criterion variables are the overwhelming approval which the program has engendered and the high degree of apparent randomness of acceptance of the incremental feature with respect to any measure generated by this study. Another source of the inability to discriminate, even among groups (such as parents and teachers) for whom the measures of feelings and attitudes distribute slightly more evenly across the possible ranges, is the homogeneity of the populations, both in terms of demographic characteristics and in terms of the responses elicited to other questions in the survey instruments.

Nevertheless, results are reported here on attempts to identify important factors associated with attitudinal acceptance of the program and of its incremental feature. Two techniques have been used to accomplish this task. First, variables which singly correlate with the criterion variables have been identified.[7/] Then a regression technique was employed using correlates of the criterion variables to generate models of the best mix of factors capable of predicting feelings about the overall program and attitudes toward the incremental feature.

1. Correlates of Attitudinal Acceptance

Based on program experience, the already discussed generally favorable feelings and attitudes among school personnel had been anticipated. It was also expected that a considerable number of study variables for these persons employed in the schools would be respectably related to the criterion variables. Therefore, discussion of the factors associated with attitudinal acceptance by teachers and principals will be limited to those variables which, on the basis of the regression analyses, represent the best combinations of correlated variables. On the other hand, correlates of acceptance among health coordinators and superintendents are presented here, following the discussion of correlates for parents, since regression techniques are inappropriate for such small groups. Since there were no

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[7/] Unbiased product-moment correlation coefficients were computed and used for the purpose of identifying factors related to the criterion variables. While few of the variables in this study meet the requirement for interval-level measurement assumed by this correlation technique, it can be demonstrated with the unweighted survey data that product-moment correlation coefficients do not significantly differ from coefficients generated by non-parametric correlation techniques which require only ordinal-level data.

compelling reasons prior to this study to anticipate either unanimous acceptance of the program and its features or strong associations between attitudinal acceptance and other factors among parents, the focus of this entire stage of the study was exploratory and was aimed primarily at the parents of participating children.

a. Correlates of Attitudinal Acceptance Among Parents. Results of the analysis of correlation coefficients for the association between study variables and the criterion variables among parents are presented in two listings below. While these listings are expressed in fairly absolute terms, it should be remembered that they are based merely on tendencies (extremely weak tendencies) among parents. The factors most highly associated with the respective criteria of attitudinal acceptance are listed in descending order to magnitude of their correlations with the criterion variables, coefficients of which are included in parentheses following each item.[8]

Parents who most like the program also:

1. Would like to have been able to choose their children's dentist, rather than having one assigned (r=0.29).
2. Trust the program dentists to do what needed to be done (r=0.28).
3. Consider the treatment provided by the program to be just as good as care paid for privately (r=0.27).
4. Live in urban counties (r=0.23).
5. Think their children's principals also like the program (r=0.23).

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[8] While product-moment correlation coefficients and regression estimates presented here are unbiased estimates of parameters (i.e., based on data weighted to account for unequal probabilities of selection), appropriate corrections for the fact that teachers and parents were selected using a cluster-sampling design have not been incorporated. Hence, for these populations, some unknown and possibly significant portion of the magnitude of any correlation coefficient may be attributable to effects of the sampling design. In order to avoid misinterpretation, therefore, significance levels of correlation coefficients are not reported and the coefficients themselves should be interpreted cautiously. Also, estimates of regression coefficients are not reported below since they are not interpretable in the absence of corrections for possible clustering effects, and it should be remembered that $R^2$ estimates for teachers and parents may be slightly inflated because of possible covariance of clustering effects with variables in the models.

6. Consider free dental care as good as care paid for privately (r=0.22).
7. Had the program explained to them by someone (r=0.21).
8. Think it important to visit a dentist at least once a year, even in the absence of dental problems (r=0.21).
9. Think their children's teachers also like the program (r=0.20).
10. Visit their dentists for check-ups more often (r=0.20).
11. Think other members of the family took better care of their teeth while their children were enrolled in the program (r=0.18).

Parents who are more accepting of the incremental feature also:

1. Think their children's teachers like the program (r=0.22).
2. Have spouses who visit their dentists for check-ups more often (than other parents' spouses) (r=0.18).
3. Knew about the incremental feature before the interview (r=0.17).
4. Think their children's principals like the program (r=0.15).
5. Live in urban counties (r=0.14).
6. Are older (r=0.12).
7. Think the government should decide which children are eligible for dental care when it is financing the program (r=0.12).
8. Are parents of sample children who had the fewest extractions (r=0.11).
9. Consider the treatment provided by the program to be just as good as care paid for privately (r=0.11).

Two conclusions may be made on the basis of the correlation analyses. First, the highest degree of association between these factors and attitudinal acceptance is only 0.29; even in the absence of any association due to cluster sampling, the degree to which these factors are associated with attitudinal acceptance singly is hardly significant in a substantive sense. Secondly, that most of the associated variables are attitude measures is only indirectly helpful in a practical way. Had some structural or demographic variables been associated with attitudinal acceptance, corrective or ameliorative action could be prescribed with respect to program features associated with attitudinal disapproval or with respect to demographic subgroups also characterized by low levels of acceptance. On the other hand, it is encouraging to note that there are no factors directly attributable to the program itself that are also highly associated with low levels of attitudinal acceptance among parents.

b. Correlates of Attitudinal Acceptance Among Health Coordinators and Superintendents. Listed below in order of decreasing magnitude of the coefficients are the factors correlated with the respective criterion variables for health coordinators and superintendents. For this group, all the variables associated with attitudinal acceptance at the 0.05 or lower level of significance have been listed (and the values of the coefficients are not affected by any sampling effects).

Health coordinators and superintendents who most like the program also:

1. Disagree that parents with children in the program did not pay much attention to what happened to their children (r=0.64).
2. Provide lower estimates of the percentage of parents not caring at all about their children's participation in the program (r=0.63) and higher estimates of the percentage of parents who very much are (r=0.49).
3. Consider the program highly successful (r=0.57).
4. Think that children in the program had better attitudes toward dentists than most other children (r=0.57).
5. Consider the program highly beneficial (r=0.47).
6. Think teachers in their systems also like the program (r=0.39).
7. Trust the program dentists to do what needed to be done (r=0.34).

Health coordinators and superintendents who are more accepting of the incremental feature also:

1. Trust the program dentists to do what needed to be done (r=0.67).
2. Think that a child's dental problems interfere with his schoolwork (r=0.66).
3. Report that the administration of the dental care program fit well with everyday operation of their school systems (r=0.54).
4. Disagree that parents have no right to question what was happening in the program (r=0.54).
5. Disagree that parents would have liked to have been able to choose the dentist rather than having one assigned (r=0.49).
6. Feel they were given enough information about the program (r=0.46).
7. Think that children in the program had better attitudes toward dentists than most other children (r=0.45).
8. Deny that taking children to go to the dentist disrupted the class in any way (r=0.41).
9. Consider the program highly successful (r=0.40).
10. Consider the program highly needed (r=0.38).
11. Consider the program highly beneficial (r=0.38).

Since for this small group of respondents it is not possible to reduce these listings of variables associated with acceptance through regression techniques by eliminating any which account for variance in the criterion variables already accounted for by variables in the model, it is appropriate to attempt some ad hoc summarization here. First of all, opinions about the program being needed, successful, or beneficial are more highly intercorrelated than are they associated with either criterion variable. Hence, knowledge of opinions on any one of these dimensions is virtually equivalent to knowing all three opinions. The same situation generally holds for the set of three attitude items concerning the amount of attention parents pay to what is happening to their children, children's attitudes toward dentists, and trust in program dentists, as well as for the set of two items about parents' right to question program activities and parents' preference for choosing the dentist. In a practical sense, these attitudes were probably only indirectly and relatively weakly influenced by anything connected with this program's operation; but it would seem advisable to encourage any program effort which complements the attitudinal positions associated with acceptance and to avoid any programmatic actions likely to detrimentally influence these attitudes.

Perhaps the most useful results of this correlation analysis for health coordinators and superintendents emerge from the associations between attitudinal acceptance and variables reflecting the program's impact on the educational institution. For example, it would appear that program efforts to avoid discontent among teachers and to make their supervisors aware of their acceptance of the program will foster higher levels of acceptance. Keeping school officials informed, merging program administration requirements as smoothly as possible into the routine of school administration, and minimizing program interference with educational activities are also to be recommended. Finally, it should be noted that these factors appear to be related to attitudinal acceptance of the program, not because the program was deficient in some areas and was therefore disliked, but rather because these program strengths were simply more keenly recognized and appreciated by some school administrators than by others.

### 2. Models for Predicting Attitudinal Acceptance

Weighted ordinary least squares regression models were generated for parents, teachers, and principals to identify the combinations of correlated factors which would account for the maximum amount of variation in attitudinal acceptance. Recalling that most of the variation in the criterion variables results from differences in the intensity of favorable or approving attitudes rather than from the expression of roughly equal proportions of accepting and nonaccepting attitudes, the application of regression techniques was further complicated by the fact that the ranges of degrees (or strength) of the correlations were small. Hence, the first variable entered into a model is even more than ordinarily the most crucial one. Thus, the results presented here should be considered exploratory, interpreted with caution, and recognized as reflecting the combinations of factors "best predictive" of acceptance only in a relative sense. Should some other factors be selected for inclusion first in a model or should some criterion other than maximization of the $R^2$ (such as minimization of residuals or error) be used, different combinations of factors associated with attitudinal acceptance would result.

The models are presented below in terms of the most important to the least important conditions (stated in absolute terms, but representing tendencies only), the satisfaction of which would result in predicting the highest levels of acceptance for the respective criterion variables. The $R^2$ estimates associated with each model can be interpreted as the proportional reductions in prediction error achieved when the models are used, over that expected by chance.

a. Parents

Most favorable feelings about the overall program ($R^2$=.185) result from:

1. Wanting to be able to choose the dentist, and
2. Having program explained by someone, and
3. Believing that other family members take better care of teeth while children are in program, and
4. Being black, and
5. Believing the school principal also likes program.

Highest acceptance of the incremental feature ($R^2$=.139) results from:

1. Knowing about the incremental feature, and
2. Believing the teachers like the program, and
3. Believing the government should decide eligibility.

b. Teachers

Most favorable feelings about the overall program ($R^2$=.586) result from:

1. Belief that the program is needed, and
2. Being willing to recommend the program to other teachers, and
3. Believing that children's educational progress is not slowed by program participation, and
4. Being in a school served by any mode of care delivery other than the mobile vans, and
5. Living in an urban county, and
6. Receiving complaints from no or only few parents.

Highest acceptance of the incremental feature ($R^2$=.447) results from:

1. Belief that free dental care is not as good as care paid for privately, and
2. Believing the government should decide eligibility, and
3. Living in an urban county, and
4. Believing that most parents of program children look to the schools to provide all health care, and
5. Estimating that only a small proportion of parents care only minimally about their children's participation in the program, and
6. Denial that parents are motivated only by the desire for something for nothing, and
7. Believing that children's educational progress is not slowed by program participation, and
8. Knowing about the incremental feature, and
9. Being in a school served by any mode of care delivery other than private practice.

c. Principals

Most favorable feelings about the overall program ($R^2$=.664) result from:

1. Believing that teachers like the program, and
2. Believing that schools should be involved in the provision of dental services to children, and
3. Feeling one knows a lot about the program, and
4. Not believing that parents of program children expect the school to provide care outside the scope of the school's responsibility.

Highest acceptance of the incremental feature ($R^2$=.690) results from:

1. Having had many parents ask questions about the program, and
2. Estimating that only a small proportion of parents care very much about their children's dental program participation, and
3. Feeling sufficiently informed about the program, and
4. Believing the government should decide eligibility, and
5. Belief that the program merges poorly with everyday school operation, and
6. Being female.

Given the contingencies involved in the application of regression techniques to these data and since there was little basis on which to posit definite other models against which those described above could be compared, interpretation of the models can proceed no further than their description. Thus, little more can be said than that these models reflect the data on which this study is based. Two points deserve amplification, however. First, the variety represented by these models would seem to indicate that there is no single set of factors among those measured in this study which would be adequate for predicting attitudinal acceptance; but the persistent appearance in most of the models of the attitude item concerning government deciding eligibility, of perceptions of the teachers' and principals' feelings, and of variables reflecting levels of knowledge is instructive. Perhaps the best way to assure acceptance of the program by everyone is to gain the approval of the school officials to the extent that they will enthusiastically proselytize for it; and perhaps the best way to gain educators' approval is to make and keep them well-informed, a task the Chattanooga Project apparently performed admirably.

The second point to be made on the basis of the models concerns the low $R^2$ achieved for parents. While the interview questions do not seem to be irrelevant, based on the fairly high correlation coefficients and $R^2$ estimates obtained for teachers and principals with identical or similar questions, it must be remembered that parents of children in the program are much less well educated, probably far less experienced in responding to personal interview questions, and thus probably more likely to provide what they think are normatively-acceptable answers. Add to these possibilities the infrequency of most parents' contact with the program while it was active and the delay of nearly two years after program cessation before they were asked to recall fairly specific information about the program and the somewhat ambiguous results of the analysis of the parents' data become more understandable.

## IV. SUMMARY AND CONCLUSIONS

The results of this survey to determine the acceptance or nonacceptance of the children's incremental dental care program are best summarized by noting that at a minimum 96 percent of all persons in each of the groups interviewed (parents, teachers, principals, superintendents, and health coordinators), either moderately or very much accepted and liked the program. This is a consistent and overwhelmingly positive response. While, as might be expected, persons in favor of the program had comments on how to improve the program, these views can only be interpreted as constructive criticism. Even the most critical respondents were enthusiastic about the program and the care it provided children whom they felt were in need of such care. On the whole, persons interviewed wanted the program to continue and to be expanded.

As was noted earlier, some parents and teachers were negative toward the program (1.3% of parents and 2.8% of the teachers). These persons constituted such a small proportion that productive analysis of these groups to discover patterned characteristics associated with their dislike of the program was hindered. For whatever reason (perhaps those disliking the program were randomly distributed throughout the sample groups), no factors systematically associated with this discontent with the program could be analytically generated. However, given the overwhelming approval of the program by all groups, it appears that there is good reason to model other programs after the Chattanooga Project. No special groups or issues of resistance were identified, on the basis of the survey data, which would dictate special strategies for introducing and administering a similar program elsewhere.

Acceptance or nonacceptance of the incremental nature of the program was distributed somewhat differently from the response to the program in general. The incremental feature was found unacceptable (unacceptable or highly unacceptable) by 36.2% of the parents, 32.5% of the teachers, 33.3% of the principals, 21.1% of the superintendents, and 14.3% of the health coordinators. It appears that the major basis for everyone's discontent lies with their liking the program and their desire that its benefits be received by a larger number of children. The most frequently voiced complaint was that children who needed the care could not get it (though this prohibition was not always attributable to the incremental nature of the program).

In interviewing, it was discovered that many persons were not aware of the incremental feature of the program. It was estimated that 84% of the parents, 70% of the teachers, 40% of the principals, 53% of the superintendents, and 10% of the health coordinators (1 of 7) claimed to have had not prior knowledge of the incremental feature of the program when it was explained to them in detail. For those persons indicating that they had known about the incremental feature, there was a high level of acceptance for the feature. For those claiming no prior knowledge of the feature, the acceptance level of the incremental feature was lower. This response among those not knowing is perhaps an artifact of how the issue was introduced during the interview. The incremental scheme was explained in detail with the use of a demonstration chart. This presentation made it very clear that some children were excluded from receiving care during each of the first five years of the program. This exclusionary feature, taken by itself and not in the context of the overall program, was responded to as being unfair. Finding the incremental feature of the program unacceptable or highly unacceptable is, in large part, conditioned by the explanation of the feature to those respondents who did not have prior knowledge of the incremental feature. On balance, however, these are the same respondents who are highly positive and accepting of the dental care program in general. They feel the incremental feature of the program excludes many "needy" children. They dislike that. But, they consider the program, to the extent that it benefits some of the children they would like to see included, a good, important, and valuable program. One might summarize their feelings with the saying that something is better than nothing.

Based on the data dealing with attitudes toward the incremental aspect of the dental care program, an obvious strategy to gain more acceptance of the incremental feature is clearly to inform more persons about it. An alternative strategy is to implement the program incrementally with no special information given out on that feature unless it is requested or questioned. In six years, all qualifying children in an elementary school would become involved in the program and the incremental feature would no longer be an issue. This latter strategy is suggested in light of the findings of this study that the focal points of concern with a children's incremental dental care program appears to be on the children, the dental care they receive, and on the administration of the program - not on the incremental feature.

General approval of the overall dental care program by parents apparently stemmed from the appreciation they felt for the dental services received by their children which they otherwise would have been unable to afford. The teachers felt the children being treated were healthier than they would have been without care. This improved state of health was seen as having positive effects on the children's school work and behavior in class. Principals and superintendents more often considered the administrative aspects of the program and found them a reasonable tradeoff for the dental care afforded to the children in the program. The health coordinators naturally focused on the health of the children receiving care and the fact that these children would not otherwise have received the care. In sum, then, if the quality of the dental care offered is high and if the implementation of the program no more than minimally interferes with educational activities, such a program will be widely accepted.

This study concludes that the children's incremental dental care program was widely accepted. Specific suggestions were made for some improvements - the major suggestion being that more "needy" children be included in the program. Although we cannot, on a statistical basis, generalize to the population of the United States from this study's homogeneous southeast Tennessee-northwest Georgia sample, it is our judgment that if such programs are implemented nationwide and modeled after the Chattanooga Program, they can reasonably expect to be similarly accepted.

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# Appendix A

## Details of Sample Design

## Details of Sample Design

A probability sample, selected from a highly stratified listing of target population schools and persons (the sampling frame), was interviewed to obtain pertinent information about the program. Interviews were sought from 566 parents, 232 teachers, 58 school administrators, 19 system superintendents, and 7 system health coordinators.

A sampling frame consisted initially of a list of participating schools (primary sampling units or PSU's), and ultimately of teacher and student lists within sample schools. The student lists contained all students who participated in the program during the 1974-75 school year in the sample schools. Students in the program in 1974-75 may have participated in the program anywhere from one to seven years. This student list was sampled by the Division of Dentistry (DD), Health Resources Administration, according to the methodology proposed by RTI, which is described in section C, below. Most elementary schools in a 13 county area in Tennessee and Georgia participated in the program and comprised the list frame of participating schools.

### A. The Sampling Frame

It should be noted, as stated earlier, that parents of students who have dropped out of the program and parents of eligible students who did not participate in the program in 1974-75 were excluded from the sampling frame. The "dropouts," for all practical purposes, arise because of families moving from the area and because of students being promoted to grades seven and eight or transferred to another school. The expense associated with tracking this group was deemed unjustified, because their leaving would presumably not be associated with their attitude about the program, and hence, should not substantially change the study findings. Eligible students who did not participate in the program are claimed to be virtually nonexistent. The small numbers involved and the high cost of acequately surveying this group led to the decision to exclude them from the study.

The basic definition of the study population can be paraphrased as: (1) parents of children receiving dental services under the auspices of the Chattanooga Project during the 1974-75 program year, (2) teachers of these children, and (3) administrators of schools being attended by these children. Implications on the study findings resulting from these population definitions were alluded to in section II.B. Here, selected additional information about the study population and the nature of exclusions from that population are presented.

Officially, the program encompasses only children in elementary schools and signup is restricted to first grade (ref. 1). Actually, however, some children in the program were signed up prior to first grade, while in a head-start center or in kindergarten. These centers and the children in them were included in the sampling frame if they were active in the 1974-75 program.

Parents of students who were at some time registered in the programs but no longer (as of 1974-75) receiving care were excluded from the study. Initially, this exclusion was thought to relate largely to families moving from the area. An analysis of the Division of Dentistry tapes revealed that approximately one-half of the students ever registered were excluded by restricting the sampling frame to the 1974-75 list of those receiving services (see section II.B for a comparison of these two subgroups). The reasons for program dropout were found to be the following:

(1) Outmigration accounted for approximately ten percent of the dropout.

(2) Two Tennessee counties that were initially in the program no longer participated, but their records remained on the DD file.

(3) Student transfers among schools in the areas contributed to this dropout because school records on program participation did not generally follow the student.

(4) Many (not all) of the seventh and eighth graders were dropped from the program.

Also, approximately one-fourth of the schools on the DD file recorded no active program participants during 1974-75. These "zero" schools were discussed individually with Monroe, the program director, and were deemed to be outside the study population by virtue of their lack of recent (if any) experience in the program. These schools were largely of the following types:

(1) schools located in high-income areas and, thus, not containing indigent children (no program eligibles),

(2) schools that were closed (largely because of the busing program),

(3) schools that have not yet initiated the program; the program has not yet been fully implemented in Walker County, Georgia, for example, and

(4) head-start centers with minimal experience in the program at some time in the past.

## B. Stratification

As noted earlier, the sample design can be described as a stratified two-stage cluster sample in which all of the school systems' 19 superintendents and 17 health coordinators and a probability sample of the principals, teachers, and families were interviewed. The schools constitute final stage sampling units for the school principals and, at the same time, comprise the clusters of secondary sampling units (SSU's) of teachers and parents. These schools were stratified into four primary strata according to the type of delivery system offered in the particular school: (1) clinic, (2) mobile unit, (3) private practice, or (4) any combination of these three basic delivery systems. Within each of the primary strata, the schools were partitioned into two substrata according to population density of the county in which the school is located. A school was classified as rural if it was located in a county with 55 percent or greater rural population according to the 1970 census of population, otherwise, it was classified urban. The resulting eight strata are, as nearly as possible, equal in size (size was measured by the number of students in the incremental dental care program).

Schools in each of the eight strata were listed according to a serpentine geographic ordering and assigned to zones. These zones could be termed strata and were analyzed similarly to strata except that a school could be a member of more than one zone. The numbers of zones in strata 1-8, respectively, are 12,2,2,27,6,5,3, and 2. This stratification and geographic ordering reflect the two-fold purpose of, first, to ensure adequate representation for pertinent population subgroups and, second, to increase precision of inferences for pertinent population groups. Attention directed to population density and geographic ordering was to facilitate efficient sampling for several factors that may be associated with level of program acceptance: for example, ethnicity of the students, family income, and size of school.

The stratification of students within each of the sample schools according to length of time in the program, which was accomplished by the sequencing of students prior to sample selection, facilitates making inferences for these pertinent subpopulations and also increases the precision of estimates about parent attitudes.

## C. Sample Selection

In this survey, the contractor adopted the protocol of using schools, as oposed to students, as the PSU's in order to structure a more efficient cluster-sampling design. If students were used as PSU's, school principals and teachers at nearly all participating schools would need to be contacted in order to obtain matched responses. Matched responses are needed to measure the interrelationships of system- and school-administrator, teacher, and parent attitudes within schools.

The allocation of sample teachers and students by stratum was as nearly as possible, a proportional allocation (proportional to estimated number of eligible students). Optimum allocation was not used because the resulting improvement over proportional allocation would probably be small considering that unit costs would be approximately equal among strata, and that the attitudinal response proportions would probably range between 0.05 and 0.95 for most questions.[1/] Additionally, the resulting approximately self-weighting sample will be more suited to the complex association analyses that may be conducted.

More specifically, the schools were drawn with replacement with probability proportional to size (PPS), by a paired-selection technique, which uses $n_h$ independent selections in each stratum ($n_h$ is the sample size for stratum h); the ordering of schools for this selection was according to county of location (see below, the protocol for student selection and (ref. 2) for a description of this selection technique). Geographic ordering of schools within each of the eight final strata was accomplished by listing counties of school location from north to south in a serpentine manner, such that geographic dispersion of each stratum sample was ensured. Because the sampling rate for schools is relatively

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[1/] Relative precision of proportional compared to optimum allocation, assuming equal size strata and equal stratum costs, range from 100 to 87 percent for proportions of .40 and .05, respectively.

large, sampling with replacement was used to avoid the involved estimation and variance equations of sampling without replacement with a high sampling rate. If a school was selected more than once, additional independent samples of parents were selected from the school. The sample elements (students, first grade teachers, or teachers in grades 2-6) within each sample school were selected with equal probabilities. Because of the high sampling rate for teachers, the multiple selection of schools was accounted for by multiple listings on the teacher file rather than by increased sample size. The sample sizes of teachers and parents were constant, to the extent possible, so that with the use of PPS sampling at the PSU stage, an approximately self-weighting sample would result. Eight parents were sought for each school selection, and two each for first grade teachers and for teachers in grades 2-6 were sought from each different school selected. Students were sampled through random pair selections from a listing of students sequenced by length of time in the program. Teachers were sampled using stratified random sampling with stratification by grade. This sampling technique ensures adequate representation of the various durations of student involvement and level of teacher involvement in the program. Also, estimation variances can be obtained at both the between and within PSU levels.

The following protocol was used for the selection of students and, subsequently, the parents to be interviewed:

(1) Calculate the intervals $I_i$, according to the following equation:

$$I_i = A_i/m_i$$

where:

$m_i \equiv$ the number of sample students for school i - an even integer, usually eight, and

$A_i \equiv$ the number of students participating in the 1974-75 program in school i.

(2) List the students according to the length of time they have participated in the program.

(3) Generate $m_i$ random numbers, $r_j$, to the nearest tenth where $00.1 \leq r_j \leq 2\ I_i$ .

(4) Relate these $r_j$ values to student numbers, 1 through $A_i$, according to the following technique:

$r_1$ designates sample student 1

$r_2$ designates sample student 2

$r_3 + 2\ I_i$ designates sample student 3

$r_4 + 2\ I_i$ designates sample student 4

.

.

.

$r_{m_i} - 1 + (0.5\ m_i - 1)\ 2\ I_i$ designates sample student $m_i - 1$

$r_{m_i} + (0.5\ m_i - 1)\ 2\ I_i$ designates sample student $m_i$.

All steps except the calculation of preliminary sampling intervals were conducted during the Division of Dentistry's computerized sample selection. This method of sample selection, which is referred to above as paired-sample selection, yields the advantages of a systematic random selection, and at the same time, avoids the main disadvantage of systematic random selection - poor estimate of precision. The technique was also used in the selection of sample schools.

The last two steps, above, were repeated if a PSU was selected more than once; as noted above. Replacement sampling (which was used for schools and parents) will permit some schools to be selected more than once, but will greatly simplify the calculation of variances. Note, that if this technique is used for selection with unequal probabilities, as in the case of sampling schools, the $I_i$ will be a function of size and the number of sample elements. The probabilities of sample selection, including the influence of increased chance of parent selection for families with more than one child in the program, were recorded so that unbiased estimates could be obtained.

## D. Sample Size

In one phase of the analysis, each survey response of attitude toward the program was classified in a dichotomy to estimate the proportion, separately for superintendents, system health coordinators, principals, teachers, and parents who found the program to be satisfactory. This would yield a response variable of the type:

$$Y_i = \begin{cases} 0 \text{ if the sample person i reports negatively,} \\ 1 \text{ otherwise.} \end{cases}$$

The maximum variance situation of 50 percent in each category is used in table A-1 to demonstrate the estimation precision that was sought for reasonable scenarios and for the intended sample sizes. Precision actually obtained for specific estimates is presented in the analysis section of the report, and the sample sizes obtained are presented in table 5.

## E. Other Sampling Considerations

Several other aspects of the study that influenced the study design are noted here:

- Personal interviews as opposed to mail survey were used for all respondent groups. Past contractor experience on mail surveys of indigent families indicates that personal interviews were needed to obtain reliable information from that group. Also, because interviewers were already in the area for those interviews, a mail survey of the other respondent groups would have had little if any cost advantage and would probably have resulted in a relatively low response rate.

- Use of alternative sample units (persons) did not seem advisable because attitudes about the program may have a direct bearing on willingness to respond to the survey. The missing responses were, however, inputed by use of a sub-class weighting technique that limits nonresponse (NR) bias.[1] NR rates were assumed in table A.1 to be 10 percent for teachers and 25 percent for parents. Actually NR was held to approximately 10 percent for both types of respondent.

## F. Weight Calculations

As pointed out earlier, samples of principals, teachers, and parents are not necessarily proportional to their counterparts in the study population. This is evidenced, for example, by the factors used as a measure of size for the PPS sampling. Note, for example, that:

- The sample contains, by design, a disproportionately large number of the schools with large numbers of program participants.

- Most sample schools contain a large number of first grade teachers compared to their numbers in the study population (even within first-grade teachers, a self weighting sample did not result because schools were not selected with probability proportional to teachers).

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[1] The weighting technique leads basically to the same result as the commonly used method for adjusting for missing observations in experimental design analysis. That is, a nonresponse was compensated for in terms of its contribution to bias by giving added weight to the response of another person in that school.

Table A.1

ANTICIPATED RELIABILITY OF ESTIMATION FOR THE SPECIFIED SAMPLE DESIGN UNDER ALTERNATIVE ASSUMPTIONS[a]

| | Population Size N | Sample Size n | Sample Returns | Assumption About Intracluster Correlation, ρ | Effective Sample Size n' (b) | Reliability v.[c] (percent) |
|---|---|---|---|---|---|---|
| Superintendents | 18 | 18 | 18 | - | 18 | 0.0 |
| Coordinators | 12 | 12 | 12 | - | 12 | 0.0 |
| School principals | 242 | 75 | 75 | - | 83 | 8.7 |
| Teachers | 800 | 225 | 200 | 0.1 | 190 | 6.3 |
| Families | 5,000 (estimate) | 600 | 450 | 0.1<br>0.2 | 333<br>250 | 5.4<br>6.3 |

---

[a] Fixed assumptions are used in this table regarding the proportion of reponse ($p = .5$), and the increased efficiency due to stratification (1.10).

[b] Based on the equation: effective sample size = $n/(.9\ (1 + \rho\ (\overline{N} - 1))$. where $\rho$ is the intra-school correlation and $\overline{N}$ is the average number of units selected within a school.

[c] Based on the equation: $c.v. = \frac{1}{p} \sqrt{\frac{N-n'}{N}} \sqrt{\frac{p(1-p)}{n'}}$

- The major reason parent responses require weighting is because of unequal numbers of children in the program; that is, large families tend to be disproportionately prevalent in the sample.

To account for these disproportionalities, weights must be used to obtain unbiased statistics (means, ratios, totals, variances, test statistics, association statistics, and model statistics). A separate weight has been calculated for each school (principal), teacher, and parent in the study. These weights were appended to their respective response records. Basically, a school weight is the inverse of its probability of selection and "expands" each school (principal) response to a half-zone estimate. Similarly, teacher, and parent weights expand the responses within a school to half-zone totals. On the data files, multiple hits (which resulted from sampling with replacement) are accounted for by multiple record listings for principals and teachers; for parents, however, the number of hits are simply recorded and each parent record is listed only once. Hence, for parents (1) the weights should be multiplied by the number of hits, or (2) the record should be repeated the same number of times that the parent was selected for the particular school.

The weights are calculated according to the following equations:

$$W_{hi} = I_h / A_{hi} \tag{1}$$

where

$W_{hi}$ ≡ the school (principal) weight for school i in stratum h,

$I_h$ ≡ the interval or half zone measure for stratum h and equals $A_h / n_h$ with $A_h - A_{h+} = \sum_{i \equiv 1}^{N_h} A_{hi}$, and

$N_h$ and $n_h$ ≡ the number of schools in the population and the sample, respectively, for stratum h, and

$A_{hi}$ ≡ the size measure for school hi, which equals the maximum of (number of students in 1974-75 program or 8).

$$W_{hik} = W_{hi} (T_{hi}/t_{hi}) \tag{2}$$

where

$W_{hik}$ ≡ the weight for teacher k in school hi,

$T_{hi}$ ≡ the number of teachers (for example, first grade teachers) in school hi, and

$t_{hi}$ ≡ the number of sample teachers (for example, first grade teachers) responding.

$$W_{hij} = W_{hi} (M_{hi}/m_{hi})/C_{hij} \tag{3}$$

where

$W_{hij}$ ≡ the weight for parent j with children in school hi,

$M_{hi}$ ≡ the number of students participating in the 1974-75 program in school hi,

$m_{hi}$ ≡ the number of sample students that had parents cooperate in the survey, and

$C_{hij}$ ≡ the number of children that parent j had participating in the 1974-75 program in school hi.

Additional notes are presented here to explain the derivation of school weights (which are component of all weights).

Notations:

The following notations apply to a particular stratum (8 strata):

$M_i$ ≡ the number of students in school i (if $M_i < 8$ then $M_i$ was set equal to 8)

and

$$M_i = \sum_z M_{iz}$$

where $M_{iz}$ is the number of students in school i, zone z. For our purpose here, a school is generally found to be in a single zone but occasionally will reside in two zones. For the latter situation, $M_i$ would be the sum of two terms.

$M_+$ ≡ total number of students in a zone

= 2I(double interval)

Note that $M_+$ is the same for all zones in one stratum but generally different than those in another stratum.

$P_i$ = selection probability for school i in zone z

$$= \frac{M_{iz}}{M_+}$$

$P'_i$ = adjusted selection "probability" for school i in zone z

$$= P_i \cdot \frac{M_i}{M_{iz}} = \frac{M_{iz}}{M_+} \cdot \frac{M_i}{M_{iz}} = \frac{M_i}{M_+}$$

$W_i$ = weight for school i

$$= (P'_i)^{-1} \times \frac{1}{2} \quad \left\{ \begin{array}{l} \text{the divisor of 2 is present because} \\ \text{we are selecting 2 schools per zone} \end{array} \right.$$

$$= \frac{M_+}{M_i} \times \frac{1}{2} = \frac{I}{M_i} \;.$$

Note that the weight of a selected school is not affected by whether it lies in 2 zones or just one. The crucial point is whether it is hit once or twice (could be hit four times but double hits were maximum).

(a) If a school is hit once in a zone:

$$W_i = (P'_i)^{-1} \times \frac{1}{2}$$

(b) If a school is hit twice in the same zone:
$W_i$ is the same as above; the only difference is that in this case the school would be listed twice with the same weight.

(c) If a school is hit twice in 2 different zones:
The treatment is the same as (b). At this point we can see the necessity of having a zone code for the computation of stratum variances. A school that is hit twice in the same zone contributes nothing to the estimated variance for statistics relating to principals:

$$s_z^2 = \frac{1}{n_z - 1} (\hat{y}_{za} - \hat{y}_{zb})^2 = (W_a y_{za} - W_b y_{zb})^2$$

where

$s_z^2 \equiv$ estimate of zone variance,

$n_z \equiv$ number of observations (schools) in zone z (=2),

$y_{za}, y_{zb} \equiv$ sample observations of the variable of interest, and

$W_a, W_b \equiv$ weights for schools a and b.

Verification:

An example is presented here to demonstrate that using the above described weights will yield unbiased estimates of the population total for a variable of interest. Let

$Y \equiv$ number of years employed at present position for all principals in a zone.

$$\therefore \quad \text{an estimate of such a total} = \sum_{i=1}^{n_z} W_i y_i = \hat{Y}$$

where

$n_z \equiv$ number of schools selected in the zone (=2)

$y_i \equiv$ total number of years for the principal in school i.

The expected value of $\hat{Y}$ is found to be:

$$E\left(\sum_{i-i}^{n_z} W_i y_i\right) = \sum_{i=1}^{2} E\left(\frac{I}{M_i} y_i\right) = I \sum_{i=1}^{2} \sum_{i=1}^{N_z} \frac{y_i}{M_i} 1 P_i$$

$$= I \sum_{i=1}^{2} \sum_{i=1}^{N_z} \frac{y_i}{M_i} \cdot \frac{M_i}{2I}$$

$$= \sum_{i=1}^{N_z} y_i = Y$$ (if there is no overlapping of schools between zones)

$\equiv$ number of schools in the population in zone z and other terms are as defined above.

**In case of presence of overlapping; that is, schools resident in more than a single zone:**

The only difference here would be in the selection probability, $P_1$. In this case,

$$P = \frac{M_{iz}}{2I} \text{ instead of } \frac{M_i}{2I} \quad (M_{iz} \leq M_i)$$

$\therefore$

$$E\left(\sum_{i=1}^{2} W_i y_i\right) = I \sum_{i=1}^{2} \sum_{i=1}^{N_z} \frac{y_i}{M_i} \cdot \frac{M_{iz}}{2I}$$

$$= \frac{1}{2} \sum_{i=1}^{2} \left\{ \sum_{i=1}^{N_z} y_i \frac{M_{iz}}{M_i} \right\}$$

$$= \frac{1}{2} \sum_{i=1}^{2} \left\{ \sum_{i \,\varepsilon\, \text{schools totally in } z} y_i + \sum_{i \,\varepsilon\, \text{overlapping schools}} y_i \frac{M_{iz}}{M_i} \right. \qquad (4)$$

for $N_z = 3$, and where school 3 lies in two zones this might be

$$= y_1 + y_2 + y_3 \left(\frac{M_{31}}{M_{31} + M_{32}}\right) \doteq Y_z \text{, the zone total.}$$

Hence $\hat{Y}$ is approximately unbiased for estimated zone totals. Also, considering the union of neighboring zones, the aggregated stratum estimate, $\hat{Y}$, is strictly unbiased. Consider the term in the brackets in (4); for neighboring zones ($z = 1,2$) that have an overlapping school observation $y_o$ we have:

$$\left\{ \sum_{i \,\varepsilon\, \text{schools in } z=1} y_i + \sum_{i \,\varepsilon\, \text{schools in } z=2} y_i + y_o \, M_{o1} / (M_{o1} + M_{o2}) \right.$$

$$\left. + \, y_o \, M_{o2} / (M_{o1} + M_{o2}) \right\}$$

$$= \left\{ \sum_{i \in z=1} y_i + \sum_{i \in z=2} y_i + y_o \right\}$$

$$= Y_1 + Y_2, \text{ the total for zones 1 and 2.}$$

Where terms are as defined above and, additionally, the overlapping school o has observation $y_o$ and selection probability $P_o = M_{oz}/2I$ in zone z.

G. Direct weighting procedure (Inverse selection probability)

A commonly used weighting procedure is to use the inverse selection probability for units selected in the sample. It is shown here that such a procedure is not appropriate for zone sampling because it leads to biased estimates of population parameters, especially totals (overestimates).

$$\text{Probability of school selection} = \frac{\text{Size of school (number of students) falling in zone z}}{\text{Number of students in zone z}}$$

i.e. $P_i = \frac{M_{iz}}{M_+} = \frac{M_{iz}}{2I}$

$\therefore$ $W_i = P_i^{-1}$ if one school is selected in zone z and

$= P_i^{-1} \times \frac{1}{n}$ if n schools are selected in zone z.

An estimate of the zone total for a particular variable, Y, might be calculated by:

$$\hat{Y} = \sum_{i=1}^{n_z} W_i y_i$$

where $y_i$ is the ith school total for the variable of interest, Y.

$$E\left(\sum_{i=1}^{n_z} W_i y_i\right) = \sum_{i=1}^{2} E\ \left\{\frac{2I}{M_{iz}} \cdot \frac{y_i}{2}\right\}$$

$$= I \sum_{i=1}^{2} E\ \left(\frac{y_i}{M_{iz}}\right)$$

$$= I \sum_{i=1}^{2} \sum_{i=1}^{N_z} \frac{y_i}{M_{iz}} \cdot \frac{M_{iz}}{2I}$$

$$= \sum_{i=1}^{N_z} y_i = Y .$$

This estimate will be unbiased only if there are no overlapping schools between the zones; however, this is not usually our case. That is, in general,

$$\sum_{i=1}^{N_z} y_i = Y \geq Y_z .$$

Because this is true for every zone, the summation of $\hat{Y}$ over zones will substantially overstate the stratum total. The bias will be

$$\sum_{i\ \epsilon\ \text{overlapping schools}} y_1$$

H. Analysis Methodology

Summarization and analyses of data obtained from this survey should reflect the fact that the data are from a stratified, two stage design and that probabilities of selection differ slightly within and among PSU's. Also, the weights that are recorded on the data files have been adjusted to account for nonresponse, or noncooperation. This method of adjusting for nonresponse, only one of several methods commonly used, is intended to reduce nonresponse bias. No known method of substitution or weight adjustment to account for nonresponse, however, is totally valid. The method here is based on the assumption that respondents in a PSU comprise a valid random sample of that PSU. Note that the equations, below, are generalized to permit their use for estimation of any geographic or cohort domain that is identified on each data record.

### 1. Estimation of Totals and Means

Zone totals can be estimates for a particular domain according to the following equations; summation over zones and, subsequently, strata yield estimates for strata and population totals, respectively.

$$\hat{Y} = \sum_z \sum_i \sum_j W_{zij} X_{zij} Y_{zij}, \text{ and}$$

averages (means) and ratios (proportions) according to:

$$\hat{\bar{Y}} = \sum_z \sum_i \sum_j W_{zij} X_{zij} Y_{zij} \Big/ \sum_z \sum_i \sum_j W_{zij} X_{zij},$$

where

$Y_{zij} \equiv$ measurement for individual j in sample PSU i of zone z.

$W_{zij} \equiv$ weight for expanding measurement $Y_{zij}$ and is calculated approximately as the reciprocal selection probability adjusted for nonresponse

$$X_{zij} \equiv \begin{cases} 1 \text{ if individual zij is a member of the particular domain or subpopulation, and} \\ 0 \text{ otherwise.} \end{cases}$$

### 2. Sampling Error (Standard Error)

The variance equations (sampling errors squared) are expressed here for totals, and means, as they are calculated in STDERR (ref. 3):

$$V(\hat{Y}) = \sum_z (\hat{Y}_{z1} - \hat{Y}_{z2})^2 \text{ for totals, and}$$

$$V(\hat{\bar{Y}}) \doteq \sum_z (N_z - n_z)\, n_z/N_z \sum_i (Z_{zi+} - Z_{z\cdot+})^2 / (n_z - 1) \text{ for averages}$$

where

$$\hat{Y}_{zi} = \sum_j W_{zij} X_{zij} Y_{zij},$$

$N_z$ and $n_z$ $\equiv$ population and sample number, respectively, of PSU's in zone z, however, with replacement sampling,

$$(N_z - n_z)/N_z \rightarrow 1$$

$$Z_{zij} \equiv (Y_{zij} - \hat{Y}) X_{zij} W_{zij} / \sum_{z} \sum_{i} \sum_{j} W_{zij} X_{zij} ,$$

$$Z_{zi+} = \sum_{j} Z_{zij}, \text{ and}$$

$$Z_{z\cdot+} = (1/n_z) \sum_{i} Z_{zi+} \quad .$$

Notice that for $n_z = 2$, that is, for 2 PSU's per zone, this simplifies to:

$$V(\hat{Y}) \doteq \sum_{z} (Z_{z1+} - Z_{z2+})^2 \quad .$$

### 3. Hypothesis Testing

Again, because the data were not obtained from simple random sampling, the usual statistics for hypotheses testing were not directly applicable. However, once the weighted estimates of parameters, say means or proportions, and the appropriate covariance matrix were obtained, hypotheses regarding linear combinations (or contrasts) of the parameters could readily be obtained from computer systems (especially SAS) that encompass matrix algebra routines. Suppose, for example, that $\hat{p}_j$ are estimated proportions for the j-th subpopulation and are estimated according to equation H.2. Let $\hat{\underline{p}}' = (\hat{p}_i, \ldots, \hat{p}_j, \ldots)$ and construct linear contrasts (orthogonal) for the pertinent hypotheses. Express these contrasts as a matrix, C. If V, the covariance matrix, is based on equation H.4, then the following statistics can be calculated:

$$X^2 = \hat{\underline{p}}'C' \, (CVC')^{-1} C\hat{\underline{p}} \quad .$$

This statistic is assymptotically chi-square with r degrees of freedom where r equals the number of rows in the C matrix. Hypotheses regarding independence of $P_j$ can be tested by using log $\hat{p}_j$ and the concomitant V.

### 4. Regression Analysis

Here too, the sample design should be accounted for, but the appropriate methodology is yet an unsettled issue. At least, the weights should be used if an ordinary least squares program is used. That is, the Y vector of observations and the X design matrix should be multiplied by an n x n diagonal matrix with $\sqrt{W_j}$ values on the diagonal where $W_j$ is the weight for the jth principal, teacher, or parent. This method coincides with the theory that weighted sample moments are reasonably good estimates of population moments even for the higher order moments (ref. 4, p. 11). Using the $\sqrt{W_j}$ method, however, often does not yield good estimates of correlation coefficients or of precision for estimates of regression coefficients. Because of these problems, RTI has developed a computer program designed to obtain more appropriate tests of hypothesis for regression models (Ref. 5). Briefly, one of the options in this program utilizes a Taylor linearization to obtain additive observation vectors to estimate mean square error, denoted $\hat{\sigma}_2$, and, hence, the covariance matrix for the estimates of regression coefficients:

$\hat{\sigma}^2(X'X)^{-1}$ where $(X'X)^{-1}$ is weighted by the diagonal weight matrix mentioned above.

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# Appendix B

## Survey Instruments with Relative Frequencies of Actual (Unweighted) Responses to Forced-Choice Questions

RTI Project 23U-1169

**O.M.B. No. 68-S-75048**
**Approval Expires 3/31/77**

| Study I.D. | 1 | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## CHILDREN'S INCREMENTAL DENTAL CARE STUDY

## PARENT INTERVIEW SCHEDULE

Hello, are you the (mother/father) of [CHILD'S FIRST AND LAST NAME]?

I'm ________________, an interviewer for the Research Triangle Institute in North Carolina. We are doing a study for the Federal Government's Health Resources Administration. The study concerns the children's dental care program in one of your child's schools. The Privacy Act of 1974* requires that whenever information is collected about individuals as part of a study sponsored by the Federal Government, the person who is being asked to take part in the study be furnished the following information.

The information which will be requested during this interview is to help the Health Resources Administration meet its responsibilities under the Public Health Service Act** which authorizes the Public Health Service to conduct research concerning dental care programs. The purpose of this study is to determine how parents, teachers, and school administrators feel about a dental care program in their schools. Your views, as well as those of the other participants, will be important to Congress when it evaluates national health proposals which include similar dental programs. However, I want you to know that all your answers are voluntary and you need not respond to any question to which you may object.

Please note that there are two numbers on this questionnaire that identify it for study purposes only, primarily to match data. At the conclusion of the study, the identification codes and the original questionnaire will be destroyed. The Health Resources Administration will receive only summaries of information, published in a statistical form so that the participants cannot be personally identified. I assure you that any information furnished by you will not be disclosed in any manner that identifies you to anyone outside the research study team.

Do you have any questions? O.K., let's begin the interview.

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* Section 3(e)(3)
** Section 301, 42 U.S.C. 241

TIME INTERVIEW BEGAN: ______ : ______ A.M. P.M.

1. We're interested in what people think and how they feel about all sorts of things. But first, I would like some information about you and your family. I need to know who is living in your household at this time. Let's begin with you. How old are you?

[RESPONDENT'S RELATIONSHIP TO SAMPLE CHILD] ______ ☐☐ [SEX] M 4.8 % F 95.2% ☐ [AGE] ______ ☐☐

2. Now let's talk about the other people living in your household. Please name them for me, starting with the adults, and I'll ask you what I need to know about each of them as you name them.

[CIRCLE NAME OF SAMPLE CHILD]

| | First Name | Relationship to Sample Child | Sex | Age | School Attending 1974-75 School Year | Grade |
|---|---|---|---|---|---|---|
| 1) | | | | | | |
| 2) | | | | | | |
| 3) | | | | | | |
| 4) | | | | | | |
| 5) | | | | | | |
| 6) | | | | | | |
| 7) | | | | | | |
| 8) | | | | | | |
| 9) | | | | | | |
| 10) | | | | | | |
| 11) | | | | | | |
| 12) | | | | | | |

A. Were there any children living in your household during the 1974-75 school year who are not living here now?

| % | | |
|---|---|---|
| (15.9 ) | Yes . [ENTER INFORMATION ABOVE FOR EACH SUCH CHILD AND MARK WITH*]. | [ ] 1 |
| (83.7) | No. . . . . . . . . . . . . . . | [ ] 2 |
| ( 0.4) | DK | 8 |

[IF SAMPLE CHILD IS NOT MENTIONED, RECORD IN LEFT MARGIN WHERE CHILD IS LIVING NOW AND WHY CHILD IS NOT LIVING IN HOUSEHOLD. (I notice you didn't mention ___________.) DETERMINE ABOVE INFORMATION FOR SAMPLE CHILD, EVEN IF NOT LIVING HERE NOW.]

3. Now we need to know a little about your education. What is the last grade you completed in school?

%

( 0.8) None. . . . . . . . . . . . . . [ ] 00

[CIRCLE GRADE NUMBER]

|  | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| %( | 0.6 | 0.2 | 2.[illegible] | 1.5 | 4.0 | 6.7 | 8.6 | 18.4 | 11.9 | 12.1 | 8.4 | 19.0) |

( 5.4) More than 12th grade. . . . . [ ] 13

[IF SPOUSE IS LIVING IN HOUSEHOLD, ASK Q.4]
[IF SPOUSE IS NOT LIVING IN HOUSEHOLD, SKIP TO Q.5]

4. What is the last grade ________________ completed in school?
[NAME OF SPOUSE]

%

( 1.3) None. . . . . . . . . . . . . . [ ] 00

[CIRCLE GRADE NUMBER]

|  | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| %( | 0.6 | 1.3 | 2.7 | 4.0 | 2.3 | 5.0 | 6.1 | 11.3 | 4.4 | 4.2 | 3.1. | 10.3) |

( 1.5) More than 12th grade. . . . . [ ] 13
(40.6) N/A (0.2) Ref.
( 1.3) DK

5. Does your family have a car?

%
(74.7) Yes . . . . . [SKIP TO Q.6] . [ ] 1
(25.3) No. . . . . . . . . . [ASK A] . [ ] 2

A. How do you get around ...

To go to work?________________ ☐
To visit friends?______________ ☐
To shop?______________________ ☐
To go to the doctor or dentist?____________ ☐

6. Now we would like to know something about the problems you may have had with your teeth and gums. Have you had a lot of problems, some problems, a few problems, or no problems with your teeth and gums?

| % |  |  |
|---|---|---|
| (47.9) | A lot . . . . . . . . . . . . . . | [ ] 1 |
| (22.2) | Some. . . . . . . . . . . . . . . | [ ] 2 |
| (16.5) | A few . . . . . . . . . . . . . . | [ ] 3 |
| (13.2) | None. . . . . . . . . . . . . . . | [ ] 4 |
| ( 0.2) | Ref. |  |

7. Have you ever been to a dentist?

| % |  |  |
|---|---|---|
| (96.0) | Yes . . . . . . . . . [ASK A] . | [ ] 1 |
| ( 3.8) | No. . . . . . [SKIP TO Q.8] . | [ ] 2 |
| ( 0.2) | Ref. | 9 |

A. When was the last time you went to the dentist?

B. Do you go to the dentist for regular check-ups or only when you have a problem, or both?

| % |  |  |
|---|---|---|
| ( 5.6) | Check-ups . . . . . [ASK C] . | [ ] 1 |
| (86.8) | Problems only . [SKIP TO D] . | [ ] 2 |
| ( 2.7) | Both. . . . . . . . . [ASK C] . | [ ] 3 |
| ( 4.4) | N/A (0.2) Ref. |  |
| ( 0.2) | DK |  |

C. How often do you go for check-ups?

D. Do you see the same dentist each time?

| % |  |  |
|---|---|---|
| (64.4) | Yes . . . . . [SKIP TO Q.8] . | [ ] 1 |
| (29.7) | No. . . . . . . . . . . [ASK E] . | [ ] 2 |
| ( 4.4) | N/A (0.2) Ref. |  |
| ( 1.3) | DK |  |

E. Why not?

8. About how often do you brush your teeth? Do you brush them ...

%
(45.6) More than once a day, . . . . . [ ] 1
(38.1) Once a day, . . . . . . . . . . . [ ] 2
(11.1) Once in a while,. . . . . . . . . [ ] 3
( 4.2) Never?. . . . . . . . . . . . . . [ ] 4
( 0.6) N/A (0.2) Ref.
( 0.2) DK

9. Do you do anything else to take care of your teeth and gums?

%
(28.0) Yes . . . . . . . . . [ASK A] . [ ] 1
(71.3) No. . . . . . [SKIP TO Q.10] . [ ] 2
( 0.4) N/A
( 0.2) Ref.

A. What do you do?

☐☐

10. I'm going to read a statement now, and I'd like for you to tell me how you feel about it. "Even though you may not have any problems with your teeth, it is important to go to the dentist at least once a year." Do you agree or disagree?

%
(30.8) Strongly Agree. . . . . . . . . [ ] 1
(67.2) Agree . . . . . . . . . . . . . . [ ] 2
( 1.9) Disagree. . . . . . . . . . . . . [ ] 3
( 0.2) Strongly Disagree . . . . . . . [ ] 4

---

[IF SPOUSE IS LIVING IN HOUSEHOLD, ASK Q.11 - 15.]
[IF SPOUSE IS NOT LIVING IN HOUSEHOLD, SKIP TO Q.16.]

11. Now I would like to ask you some things about your (husband's/wife's) dental habits. Has (he/she) had a lot of problems, some problems, a few problems, or no problems with (his/her) teeth or gums?

%
(27.4) A lot . . . . . . . . . . . . . . [ ] 1
( 9.4) Some. . . . . . . . . . . . . . . [ ] 2
(13.6) A few . . . . . . . . . . . . . . [ ] 3
( 9.2) None. . . . . . . . . . . . . . . [ ] 4
(40.4) N/A

12. Has ______________ ever been to a dentist?
[NAME OF SPOUSE]

| | | | | |
|---|---|---|---|---|
| % | | | | |
| (56.5) | Yes . . . . . . . . . | [ASK.A] . | [ ] | 1 |
| ( 2.9) | No. . . . . . | [SKIP TO Q.13] . | [ ] | 2 |
| (40.4) | N/A | | | |
| ( 0.2) | DK | | | |

A. When was the last time (he/she) went to the dentist?

______________________________ ☐☐

B. Does (he/she) go to the dentist for regular check-ups or only when (he/she) has a problem, or both?

| | | | | |
|---|---|---|---|---|
| % | | | | |
| ( 3.3) | Check-ups . . . . . | [ASK C] . | [ ] | 1 |
| (51.0) | Problems only . | [SKIP TO D] . | [ ] | 2 |
| ( 1.5) | Both. . . . . . . . . | [ASK C] . | [ ] | 3 |
| (43.5) | N/A | | | |
| ( 0.6) | DK | | | |

C. How often does ______________ go for check-ups?
[NAME OF SPOUSE]

______________________________ ☐☐

D. Does (he/she) see the same dentist each time?

| | | | | |
|---|---|---|---|---|
| % | | | | |
| (41.4) | Yes . . . . . | [SKIP TO Q.13] . | [ ] | 1 |
| (13.2) | No. . . . . . . . . . | [ASK E] . | [ ] | 2 |
| (43.7) | N/A | | | |
| ( 1.7) | DK | | | |

E. Why not?

________________________________________

________________________________________

________________________________________

________________________________________ ☐☐

13. About how often does ______________ brush (his/her) teeth? Does
[NAME OF SPOUSE]
(he/she) brush them ...

| | | | |
|---|---|---|---|
| % | | | |
| (17.2) | More than once a day, . . . . | [ ] | 1 |
| (23.8) | Once a day, . . . . . . . . . . | [ ] | 2 |
| ( 9.2) | Once in a while,. . . . . . . . | [ ] | 3 |
| ( 7.7) | Never?. . . . . . . . . . . . . | [ ] | 4 |
| (41.2) | N/A | | |
| ( 0.8) | DK | | |

14. Does (he/she) do anything else to take care of (his/her) teeth and gums?

| % | | |
|---|---|---|
| (11.7) | Yes . . . . . . . . . [ASK A] . [ ] | 1 |
| (47.3) | No. . . . . .[SKIP TO Q.15] . [ ] | 2 |
| (40.8) | N/A | |
| ( 0.2) | DK | |

A. What does (he/she) do?

15. How do you think ________________ feels about the following statement?
[NAME OF SPOUSE]
"Even though you may not have any problems with your teeth, it is important to go to a dentist at least once a year." Do you think (he/she) agrees or disagrees?

| % | | |
|---|---|---|
| ( 8.8) | Strongly Agree. . . . . . . . . [ ] | 1 |
| (45.4) | Agree . . . . . . . . . . . . . [ ] | 2 |
| ( 4.6) | Disagree. . . . . . . . . . . . [ ] | 3 |
| ( 0.6) | Strongly Disagree . . . . . . . [ ] | 4 |
| (40.4) | N/A | |
| ( 0.2) | DK | |

---

[ACROSS TOP OF NEXT TWO PAGES, WRITE NAMES OF ALL CHILDREN, AGES 3-14, FROM Q.2. LIST IN ORDER, OLDEST ON LEFT TO YOUNGEST ON RIGHT.]

| | Columns 53-59 | Columns 60-66 | Columns 6 |
|---|---|---|---|

[WRITE NAMES OF ALL CHILDREN, AGES 3-14, FROM Q.2.
LIST IN ORDER, OLDEST ON LEFT TO YOUNGEST ON RIGHT.]

1 ________ 2 ________ 3 ________

16. Has ____________ ever been to a dentist?

| | | 1 | 2 | 3 |
|---|---|---|---|---|
| Yes. . . . . . . . . . . | [ASK A] | [ ]1 | [ ]1 | [ ]1 |
| No . . . . . . . . . | [SKIP TO C] | [ ]2 | [ ]2 | [ ]2 |
| Don't know . . . . | [SKIP TO C] | [ ]8 | [ ]8 | [ ]8 |

A. Have you received any help in getting dental care for ____________?

| | | 1 | 2 | 3 |
|---|---|---|---|---|
| Yes. . . . . . . . . . . | [ASK B] | [ ]1 | [ ]1 | [ ]1 |
| No . . . . . . . . . | [SKIP TO C] | [ ]2 | [ ]2 | [ ]2 |

B. Who has helped you get dental care for ________________?

| | | 1 | 2 | 3 |
|---|---|---|---|---|
| School . . . . | [MARK BOX BELOW AND SKIP TO E] | [ ]1 | [ ]1 | [ ]1 |
| Other. . . . . | ["Anyone else?" THEN ASK C] | [ ]2 | [ ]2 | [ ]2 |

C. Has ____________'s school ever had a dental care program?

| | | 1 | 2 | 3 |
|---|---|---|---|---|
| Yes. . . . . . . . . . . | [ASK D] | [ ] 1 | [ ] 1 | [ ] |
| No . . . . | [GO TO NEXT CHILD]* | [ ]*2 | [ ]*2 | [ ]* |
| Don't know | [GO TO NEXT CHILD]* | [ ]*8 | [ ]*8 | [ ]* |

D. Has ____________ been in the school dental program?

| | | 1 | 2 | 3 |
|---|---|---|---|---|
| Yes. . . . . . | [MARK BOX BELOW AND ASK E] | [ ] 1 | [ ] 1 | [ ] |
| No . . . . | [GO TO NEXT CHILD]* | [ ]*2 | [ ]*2 | [ ]* |
| Don't know | [GO TO NEXT CHILD]* | [ ]*8 | [ ]*8 | [ ]* |

E. What grade was __________ in when (he/she) began getting dental care through the school?

Grade. . .[SPECIFY, GO TO NEXT CHILD]* 1 _______* 2 _______* 3 _______

* [WHEN Q.16 IS COMPLETED FOR THE LAST CHILD, FOLLOW THESE INSTRUCTIONS TO CONTINUE INTERVIEW:]

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| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | |
|---|---|---|---|---|---|
| Columns 8-14 | Columns 15-21 | Columns 22-28 | Columns 29-35 | Columns 36-42 | Columns 43-49 |
| 4 ________ | 5 ________ | 6 ________ | 7 ________ | 8 ________ | 9 ________ |
| ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 |
| ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 |
| ....[ ]8 | ....[ ]8 | ....[ ]8 | ....[ ]8 | ....[ ]8 | ....[ ]8 |
| | | | | | |
| ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 |
| ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 |
| | | | | | |
| ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 | ....[ ]1 |
| ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 | ....[ ]2 |
| | | | | | |
| ....[ ] 1 | ....[ ] 1 | ...[ ] 1 | ....[ ] 1 | ...[ ] 1 | ....[ ] 1 |
| ....[ ]*2 | ....[ ]*2 | ...[ ]*2 | ....[ ]*2 | ...[ ]*2 | ....[ ]*2 |
| ....[ ]*8 | ....[ ]*8 | ...[ ]*8 | ....[ ]*8 | ...[ ]*8 | ....[ ]*8 |
| | | | | | |
| ....[ ] 1 | ....[ ] 1 | ...[ ] 1 | ....[ ] 1 | ...[ ] 1 | ....[ ] 1 |
| ....[ ]*2 | ....[ ]*2 | ...[ ]*2 | ....[ ]*2 | ...[ ]*2 | ....[ ]*2 |
| ....[ ]*8 | ....[ ]*8 | ...[ ]*8 | ....[ ]*8 | ...[ ]*8 | ....[ ]*8 |
| | | | | | |
| 4 _______* | 5 _______* | 6 _______* | 7 _______* | 8 _______* | 9 _______* |

→ ☐ [IF BOX IS MARKED, GO TO SCHEDULE A.] → 01

[IF BOX IS NOT MARKED, SKIP TO SCHEDULE B.] → 02

| | |
|---|---|
| | |
| 50 | 51 |

**SCHEDULE A**

17. Now I'd like for you to tell me something about the dental care program your (child/children) (was/were) in at school. How did your (child/children) get into this school dental care program?

A. Who could get into the school dental care program, all children or just some children?

| % | | | |
|---|---|---|---|
| (28.5) | | All . . . . .[SKIP TO Q.18] | [ ] 1 |
| (40.2) | | Some. . . . . . . . . [ASK B] | [ ] 2 |
| (29.7) | [DO NOT READ] | Don't know. .[SKIP to Q.18] | [ ] 8 |
| ( 1.7) | | N/A | |

B. Which ones?

18. What were some things you liked about the school dental care program?

[PROBE FOR SPECIFICS]

19. What were some things you disliked about the school dental care program?

[PROBE FOR SPECIFICS] ______________________________

______________________________

______________________________

______________________________

______________________________

______________________________ ☐☐

______________________________ ☐☐

---

20. Was the dental care program explained to you by anyone?

%
(26.8) Yes . . . . . . . . . [ASK A] . [ ] 1
(71.3) No. . . . . . . . [SKIP TO B] . [ ] 2
( 1.7) N/A
( 0.2) DK

A. Who explained it to you?

[PROBE FOR SCHOOL POSITION] ______________________________ ☐☐

B. Have you ever contacted the school for information about the dental program?

%
( 9.0) Yes . . . . . . . . . . [ASK C] . [ ] 1
(89.3) No. . . . . .[SKIP TO Q.21] . [ ] 2
( 1.7) N/A

C. Who did you talk to?

[PROBE FOR SCHOOL POSITION] ______________________________ ☐☐

D. What did you want to know?

______________________________

______________________________

______________________________ ☐☐

E. Were you satisfied with what you were told?

%
( 7.5) Yes . . . . . . . . . . . . . . . [ ] 1
( 1.3) No. . . . . . . . . . . . . . . . [ ] 2
(91.0) N/A
( 0.2) DK

OFFICE USE ONLY

**OFFICE USE ONLY**

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

21. How do you think the teachers felt about the program? Did they like it or dislike it?

| | % | | | |
|---|---|---|---|---|
| | ( 9.0) | Liked it very much . . . . . . . | [ ] | 1 |
| | (47.9) | Liked it . . . . . . . . . . . . . | [ ] | 2 |
| | ( 0.4) | Disliked it. . . . . . . . . . . | [ ] | 3 |
| | ( - ) | Disliked it very much. . . . . | [ ] | 4 |
| (41.0) | [DO NOT READ] | Don't know . . . . . . . . . . . | [ ] | 8 |
| | ( 1.7) | N/A | | |

22. How do you think the school principal felt about the dental program? Did (he/she) like it or dislike it?

| | % | | | |
|---|---|---|---|---|
| | (10.0) | Liked it very much . . . . . . . | [ ] | 1 |
| | (47.1) | Liked it . . . . . . . . . . . . . | [ ] | 2 |
| | ( 0.2) | Disliked it. . . . . . . . . . . | [ ] | 3 |
| | ( - ) | Disliked it very much. . . . . | [ ] | 4 |
| (41.0) | [DO NOT READ] | Don't know . . . . . . . . . . . | [ ] | 8 |
| | ( 1.7) | N/A | | |

23. Do you think the other children made fun of your (child/children) because (he/she/they) (was/were) in the program?

| | % | | | |
|---|---|---|---|---|
| | ( 2.9) | Yes . . . . . . . . . . . . . . . | [ ] | 1 |
| | (89.7) | No. . . . . . . . . . . . . . . . | [ ] | 2 |
| ( 5.6) | [DO NOT READ] | Don't know. . . . . . . . . . . | [ ] | 8 |
| | ( 1.7) | N/A | | |

24. Do you think the teachers treated your (child/children) any differently because your (child/children) (was/were) in the dental program?

| | % | | | |
|---|---|---|---|---|
| | ( 0.4) | Yes . . . . . . . . . . . . . . . | [ ] | 1 |
| | (93.7) | No. . . . . . . . . . . . . . . . | [ ] | 2 |
| ( 4.2) | [DO NOT READ] | Don't know. . . . . . . . . . . | [ ] | 8 |
| | ( 1.7) | N/A | | |

---

[PREPARE TO GIVE RESPONSE CARD TO RESPONDENT]

Now I would like to read you some statements. [HAND CARD TO RESPONDENT] Using these answers, please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements.

| | Strongly Agree<br>% | | Agree<br>% | | Disagree<br>% | | Strongly Disagree<br>% |
|---|---|---|---|---|---|---|---|
| 25. It's the school's job to provide dental care. | ( 2.9)<br>1 | (0.2)<br>N/A | (38.1)<br>2 | (5.9)<br>DK | (49.2)<br>3 | (0.2)<br>REF. | ( 3.6)<br>4 |
| 26. Having my child(ren) in the dental care program made me feel like I was taking charity. | ( 1.0)<br>1 | (0.2)<br>N/A | ( 9.8)<br>2 | (0.6)<br>DK | (74.9)<br>3 | (0.2)<br>REF. | (13.2)<br>4 |
| 27. When the government is paying the bill, it should decide which children are eligible for care. | ( 5.2)<br>1 | (2.1)<br>N/A | (58.8)<br>2 | | (29.3)<br>3 | (0.4)<br>REF. | ( 4.2)<br>4 |
| 28. When dental care is free, it is as good as when you pay for it. | (17.4)<br>1 | (1.3)<br>N/A | (73.8)<br>2 | | ( 6.5)<br>3 | (0.4)<br>REF. | ( 0.6)<br>4 |
| 29. I have the right to question what is happening in a dental care program even though I am not paying for the dental care. | (20.3)<br>1 | (0.8)<br>N/A | (73.0)<br>2 | | ( 4.8)<br>3 | (0.2)<br>REF. | ( 0.8)<br>4 |
| 30. I trusted the program dentists to do what needed to be done for my child(ren). | (18.0)<br>1 | (0.4)<br>N/A | (80.5)<br>2 | | ( 0.8)<br>3 | (0.2)<br>REF. | ( - )<br>4 |
| 31. My pride almost kept me from enrolling my child(ren) in the school dental care program. | ( 1.3)<br>1 | (1.0)<br>N/A | ( 5.0)<br>2 | (1.3)<br>DK | (78.9)<br>3 | (0.2)<br>REF. | (12.3)<br>4 |
| 32. I would liked to have been able to choose a dentist for my child(ren) rather than having one assigned. | ( 2.3)<br>1 | (0.2)<br>N/A | (28.9)<br>2 | (0.6)<br>DK | (63.4)<br>3 | (0.6)<br>REF. | ( 4.0)<br>4 |
| 33. The program dentists' treatment was just as good as dental care you pay for. | (22.8)<br>1 | (0.2)<br>N/A | (71.8)<br>2 | (1.0)<br>DK | ( 3.3)<br>3 | (0.2)<br>REF. | ( 0.6)<br>4 |
| 34. It should be part of the school's job to be involved in providing dental services to children. | ( 5.6)<br>1 | (2.9)<br>N/A | (69.9)<br>2 | | (20.3)<br>3 | (0.2)<br>REF. | ( 1.0)<br>4 |

[RETURN TO SKIPPED ITEMS.]

---

[RETRIEVE RESPONSE CARD FROM RESPONDENT.]

35. If you had to pay a fee of one dollar ($1) each time (your child/ one of your children) went to the dentist in the school program, would you have allowed (him/her/them) to continue in the program at the school?

| % | | |
|---|---|---|
| (93.3) | Yes . . . . . . . . . [ASK A] . | [ ] 1 |
| ( 5.0) | No. . . . . . [SKIP TO Q.36] . | [ ] 2 |
| ( 1.7) | N/A | |

A. How much more than one dollar ($1) per visit would you have been willing to pay? [PAUSE] Each time (your child/one of your children) saw the dentist in the school program, would you have been willing to pay . . .

| % | | |
|---|---|---|
| ( 4.0) | None | |
| (13.2) | Two dollars ($2), . . . . . . . . | [ ] 01 |
| ( 9.0) | Three dollars ($3), . . . . . . . | [ ] 02 |
| ( 4.0) | Four dollars ($4),. . . . . . . . | [ ] 03 |
| (11.0) | Five dollars ($5),. . . . . . . . | [ ] 04 |
| ( 2.0) | Six dollars ($6), . . . . . . . . | [ ] 05 |
| ( 1.0) | Seven dollars ($7), . . . . . . . | [ ] 06 |
| ( 1.0) | Eight dollars ($8), . . . . . . . | [ ] 07 |
| ( - ) | Nine dollars ($9),. . . . . . . . | [ ] 08 |
| ( 3.3) | Ten dollars ($10),. . . . . . . . | [ ] 09 |
| ( 2.0) | More than ten dollars? [SPECIFY AMOUNT]. | [ ] |
| | $__________ | |
| (35.0) | Can't give exact amount since it would depend on circumstances at the time . . | [ ] 77 |
| ( 5.0) | Don't know. . . . . . . . . . . . | [ ] 88 |
| ( 0.2) | N/A | |

36. If your (child/children) had not received dental care through the school, what would you have done? Would you have ...

| % | | | |
|---|---|---|---|
| (74.5) | Sent (him/her/them) to a private dentist only when (he/she/they) had a problem and paid,. . . . . . . . . . . . | [ ] | 1 |
| (10.7) | Sent (him/her/them) to a private dentist for regular check-ups and paid,. . . . . . . | [ ] | 2 |
| ( 3.6) | Done nothing,. . . . . . . . . . . | [ ] | 3 |
| ( 9.4) | Done something else?[SPECIFY]. | [ ] | |
| ( 1.7) | N/A | | |
| ( 0.2) | DK | | |

37. After you first heard about the school dental program, did you hesitate to enroll your (child/children)?

| % | | | |
|---|---|---|---|
| ( 6.5) | Yes . . . . . . . . . [ASK A] . | [ ] | 1 |
| (90.6) | No. . . . . . .[SKIP TO Q.38] . | [ ] | 2 |
| ( 1.7) | N/A (0.2) Ref. | | |
| ( 1.0) | DK | | |

A. Who or what changed your mind? [PAUSE] Did you ...

| Yes (%) | No (%) | N/A (%) | | | Yes or | No |
|---|---|---|---|---|---|---|
| (1.3) | (5.2) | (93.5) | Find out there were no strings attached? . . . . . . . | [ ] | 1 | 2 |
| (1.3) | (5.2) | (93.5) | Learn about other parents enrolling their children? . . | [ ] | 1 | 2 |
| (2.7) | (3.8) | (93.5) | Get talked into it by someone? . . . . [ASK B] . | [ ] | 1 | 2 |
| | | | Some other reason?.[SPECIFY]. | [ ] | | |

30 31

B. Who talked you into changing your mind?

| Yes (%) | No (%) | N/A (%) | | | Yes or | No |
|---|---|---|---|---|---|---|
| (0.6) | (2.1) | (97.3) | Social worker . . . . . . . . . | [ ] | 1 | 2 |
| (0.8) | (1.9) | (97.3) | Teacher . . . . . . . . . . . . . | [ ] | 1 | 2 |
| (0.4) | (2.3) | (97.3) | School nurse. . . . . . . . . . | [ ] | 1 | 2 |
| ( - ) | (2.7) | (97.3) | Relative. . . . . . . . . . . . | [ ] | 1 | 2 |
| (0.4) | (2.3) | (97.3) | Friend. . . . . . . . . . . . . | [ ] | 1 | 2 |
| | | | Other [SPECIFY] . . . . . . . . | [ ] | | |

38. Some parents have difficulty getting dental care for their (child/children). If your (child/children) had not been in the school program, which of the following would have been a problem for you? Would ...

| % Yes | % No | % N/A | | Yes | or No |
|---|---|---|---|---|---|
| (88.9) | ( 9.4) | (1.7) | Paying a private dentist have been a problem for you? . . . . . . . . . . . . . . [ ] | 1 | 2 |
| (41.6) | (56.7) | (1.7) | Transportation to the dentist's office have been a problem for you? . . . . . . . . . . . . . . [ ] | 1 | 2 |
| (31.2) | (67.2) | (1.7) | Getting time off from work have been a problem for you? . . . . . . . . . . . [ ] | 1 | 2 |
| (13.2) | (85.1) | (1.7) | Not liking to go to a dentist's office have been a problem for you?. . . [ ] | 1 | 2 |

39. Overall, how did you feel about the program? Did you like it, dislike it, or were you neutral?

| % | | |
|---|---|---|
| (59.2) | Liked it very much . . . . . . . [ ] | 1 |
| (33.9) | Liked it . . . . . . . . . . . . . [ ] | 2 |
| ( 3.6) | Didn't care one way or the other . . . . . . . . . . [ ] | 3 |
| ( 1.0) | Disliked it. . . . . . . . . . . . [ ] | 4 |
| ( - ) | Disliked it very much. . . . . [ ] | 5 |
| ( 1.7) | N/A | |
| ( 0.6) | DK | |

40. While your (child/children) (was/were) in the program, did other members of the family take better care of their teeth, worse care of their teeth, or about the same care?

| % | | |
|---|---|---|
| (47.3) | Better. . . . . . . . . . . . . . [ ] | 1 |
| ( 0.2) | Worse . . . . . . . . . . . . . . [ ] | 2 |
| (50.2) | About the same. . . . . . . . . [ ] | 3 |
| ( 1.7) | N/A | |
| ( 0.6) | DK | |

[PREPARE TO GIVE INCREMENTAL CHART TO RESPONDENT.]

[INTRODUCTION TO INCREMENTAL CHART]

Now I'd like to talk to you about how the school dental care program
worked. On this chart [SHOW CHART] we have figures with and without
] toothbrushes to represent children in the six grades of an elementary
school. The first grade is on the left here [POINT TO FIRST GRADE
COLUMN], the second grade is next, the third grade, fourth grade, fifth
] grade, and over here on the right is the sixth grade [POINT TO SUCCESSIVE
COLUMNS GOING FROM LEFT TO RIGHT]. Now, each row here [POINT TO THE
ROWS IN SUCCESSION AS YOU EXPLAIN] represents a school year for the
3] program. At the top is the first year of the program, below it is the
second year, the third year, the fourth year of the program, the fifth
year, and the sixth year of the program.

O.K. Here is how the program worked. In the first year of the
4] program, only eligible first graders were given dental care in the
program, as shown by the figure with the toothbrush [POINT TO YEAR ONE
FIGURE WITH TOOTHBRUSH]. Notice that the children in grades two through
] six don't have toothbrushes since they were not included in the program.

In the second year [POINT TO SECOND YEAR ROW], the children who
] were in the first grade moved to the second grade [POINT TO THE TRANSITION
ARROW] and were still in the program. Also, in the second year, the new
first graders [POINT] eligible for the program got dental care in the
] program. But, children in grades three through six [POINT] weren't
included in the program.

In the third year [POINT], the second-year first graders moved to
second grade [POINT] and the second-year second graders moved to third
] grade [POINT] and both these eligible groups remained in the program. In
addition [POINT TO THIRD YEAR ROW], a new group of eligible first graders
entered the program. Now there were three grades of children in the program
9] in the third year [POINT], and three grades of children who were not
included in the program [POINT].

[ CONTINUE THROUGH SIX YEARS SHOWING (1) HOW A NEW FIRST GRADE GROUP
GOT INTO THE PROGRAM EACH YEAR, (2) HOW THE GROUPS OF CHILDREN IN THE
PROGRAM CONTINUED IN THE PROGRAM AS THEY PROGRESSED FROM GRADE TO GRADE,
AND (3) HOW SOME GRADES WERE NOT INCLUDED UNTIL THE SIXTH YEAR. ]

That is how the program worked. Would you like me to explain it again? [IF REQUESTED, EXPLAIN ONE MORE TIME.]

---

41. Now that I have explained how the program worked, did you already know about it or is this new to you?

| % | | |
|---|---|---|
| (15.9) | Knew already. . . . . . . . . . [ ] | 1 |
| (84.1) | Didn't know . . . . . . . . . . [ ] | 8 |

42. How do you feel about this way of providing children's dental care?

43. Do you find this way of running the program acceptable or unacceptable?

| % | | |
|---|---|---|
| ( 7.7) | Highly acceptable. .[SKIP TO Q.44] . [ ] | 1 |
| (52.9) | Acceptable. .[SKIP TO Q.44] . [ ] | 2 |
| (32.8) | Unacceptable. . . . [ASK A] . [ ] | 3 |
| ( 4.8) | Highly unacceptable [ASK A] . [ ] | 4 |
| ( 1.5) | N/A | |
| ( 0.2) | Ref. | |

A. What could be done to improve it?

44. If you will look at the chart again [SHOW CHART], you will notice that for the first year of the program, if a family had a child in the first grade and a child in the third grade, then only the first grader would get in the program, but not the third grader. Or, another example, if a family had a child in any grade, two through six, that child would not get in the program, but if a family had a child in the first grade, that child could get in the program. [PAUSE] Do you feel that this way of running the program is fair or unfair?

| % | | |
|---|---|---|
| ( 1.7) | Very fair . [SKIP TO CLOSING STATEMENT] . [ ] | 1 |
| (28.5) | Fair. . . . [SKIP TO CLOSING STATEMENT] . [ ] | 2 |
| (49.6) | Unfair. . . . . . . [ASK A] . [ ] | 3 |
| (17.8) | Very unfair . . . . [ASK A] . [ ] | 4 |
| ( 1.7) | N/A | |
| ( 0.8) | DK | |

A. Did you complain to anyone about this way of running the program?

| % | | |
|---|---|---|
| ( 3.3) | Yes . . . . . . . . . . [ASK B] . [ ] | 1 |
| (64.0) | No. . . . . [SKIP TO CLOSING STATEMENT] . [ ] | 2 |
| (31.8) | N/A | |
| ( 0.8) | DK | |

B. Who did you complain to?

%

| Yes | NO | N/A | | Yes or No | |
|---|---|---|---|---|---|
| (0.8) | (2.5) | (96.7) | School teacher. . . . . . . . . [ ] | 1 | 2 |
| (0.8) | (2.5) | (96.7) | School principal. . . . . . . . [ ] | 1 | 2 |
| (3.3) | ( - ) | (96.7) | School nurse. . . . . . . . . . [ ] | 1 | 2 |
| (0.4) | (2.9) | (96.7) | Other parents . . . . . . . . . [ ] | 1 | 2 |
| (0.6) | (2.7) | (96.7) | Relative. . . . . . . . . . . . [ ] | 1 | 2 |
| (1.5) | (1.9) | (96.7) | Friend. . . . . . . . . . . . . [ ] | 1 | 2 |
| | | | Other [SPECIFY] . . . . . . . . [ ] | | |

_______________________________ ☐☐

61 62

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[RETRIEVE INCREMENTAL CHART FROM RESPONDENT.]

[CLOSING STATEMENT]

That's all the questions I have. Thank you very much for your time and cooperation. Your answers have been very helpful.

---

TIME INTERVIEW ENDED: ______________________________ A.M. P.M.

[PLEASE COMPLETE THE INTERVIEWER'S REMARKS IMMEDIATELY AFTER YOU LEAVE THE RESPONDENT.]

## SCHEDULE B

Now I would like to read you some statements. [HAND CARD TO RESPONDENT] Using these answers, please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements.

| | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| 17. It's the school's job to provide dental care. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 18. Having my child(ren) in a school dental care program would make me feel like I was taking charity. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 19. When the government is paying the bill, it should decide which children get into a dental care program. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 20. When dental care is free, it is as good as when you pay for it. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 21. I have the right to question what is happening in a dental care program even though I am not paying for the dental care. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 22. I would trust school program dentists to do what needs to be done for my child(ren). | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 23. My pride would keep me from enrolling my child(ren) in a school dental care program. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 24. I would like to be able to choose a dentist for my child rather than having one assigned. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 25. A school program dentist's treatment would be just as good as dental care you pay for. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |
| 26. It should be part of the school's job to be involved in providing dental services to children. | ☐<br>1 | ☐<br>2 | ☐<br>3 | ☐<br>4 |

[RETURN TO SKIPPED ITEMS.]

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[RETRIEVE RESPONSE CARD FROM RESPONDENT.
GIVE INCREMENTAL CHART TO RESPONDENT.]

[INTRODUCTION TO INCREMENTAL CHART]

Now I'd like to talk to you about how a school dental care program
might work. On this chart [SHOW CHART] we have figures with and without
[1] toothbrushes to represent children in the six grades of an elementary
school. The first grade is on the left here [POINT TO FIRST GRADE
COLUMN], the second grade is next, the third grade, fourth grade, fifth
grade, and over here on the right is the sixth grade [POINT TO SUCCESSIVE
[2] COLUMNS GOING FROM LEFT TO RIGHT]. Now, each row here [POINT TO THE
[3] ROWS IN SUCCESSION AS YOU EXPLAIN] represents a school year for the
program. At the top is the first year of the program, below it is the
second year, the third year, the fourth year of the program, the fifth
year, and the sixth year of the program.

O.K. Here is how the program would work. In the first year of the
[4] program, only eligible first graders would be given dental care in the
program, as shown by the figure with the toothbrush [POINT TO YEAR ONE
[5] FIGURE WITH TOOTHBRUSH]. Notice that the children in grades two through
six don't have toothbrushes since they would not be included in the program.

In the second year [POINT TO SECOND YEAR ROW], the children who
[6] were in the first grade move to the second grade [POINT TO THE TRANSITION
ARROW] and would still be in the program. Also, in the second year, the
[7] new first graders [POINT] eligible for the program would get dental care
in the program. But, children in grades three through six [POINT]
wouldn't be included in the program.

In the third year [POINT], the second-year first graders move to
second grade [POINT] and the second-year second graders move to third
[8] grade [POINT] and both groups would remain in the program. In addition
[POINT TO THIRD YEAR ROW], a new group of eligible first graders would
enter the program. Now there would be three grades of children in the
[9] program in the third year [POINT], and three grades of children who
would not be included in the program [POINT].

CONTINUE THROUGH SIX YEARS SHOWING (1) HOW A NEW FIRST GRADE GROUP WOULD GET INTO THE PROGRAM EACH YEAR, (2) HOW THE GROUPS OF CHILDREN IN THE PROGRAM WOULD CONTINUE IN THE PROGRAM AS THEY PROGRESS FROM GRADE TO GRADE, AND (3) HOW SOME GRADES WOULD NOT BE INCLUDED UNTIL THE SIXTH YEAR.

O.K., that is how the program might work. Would you like me to explain it again? [IF REQUESTED, EXPLAIN ONE MORE TIME.]

27. Now that I have explained how a school dental program might work, have you ever heard about a dental program that works this way?

Yes . . . . . . . . . . . . . . [ ] 1
No. . . . . . . . . . . . . . . [ ] 2

28. How do you feel about this way of providing children's dental care?

________________________________________
________________________________________
________________________________________
________________________________________ ☐☐

29. Would you find this way of running the program acceptable or unacceptable?

Highly acceptable . . . . . .
[SKIP TO CLOSING STATEMENT] . [ ] 1
Acceptable. . . . . . . . . .
[SKIP TO CLOSING STATEMENT] . [ ] 2
Unacceptable. . . . [ASK A] . [ ] 3
Highly unacceptable [ASK A] . [ ] 4

A. What could be done to improve it?

________________________________________
________________________________________
________________________________________ ☐☐
________________________________________ ☐☐

---

[RETRIEVE INCREMENTAL CHART FROM RESPONDENT.]

[CLOSING STATEMENT]

That's all the questions I have. Thank you very much for your time and cooperation. Your answers have been very helpful.

---

TIME INTERVIEW ENDED: __________________ A.M. P.M.

[PLEASE COMPLETE THE INTERVIEWER'S REMARKS IMMEDIATELY AFTER YOU LEAVE THE RESPONDENT.]

| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## INTERVIEWER REMARKS

[TO BE FILLED OUT IMMEDIATELY AFTER YOU HAVE COMPLETED THE INTERVIEW AND LEFT THE RESPONDENT'S HOME.]

DATE INTERVIEW COMPLETED: ____/____/__77
mo. day year

[HOW LONG DID THE INTERVIEW TAKE: ____________________ MINUTES]

1. Race of respondent:

| % | | | |
|---|---|---|---|
| (62.1) | White, not Spanish-speaking. . . . . . . . | [ ] | 1 |
| (37.7) | Black, not Spanish-speaking. . . . . . . . | [ ] | 2 |
| ( 0.2) | Hispanic descent (i.e., speaks Spanish). . . . | [ ] | 3 |
| ( - ) | Asian or Pacific Islander. . . . . . . . | [ ] | 4 |
| ( - ) | American Indian . . . . . . . . | [ ] | 5 |
| | Other [SPECIFY] . . . . . . . . | [ ] | |
| | ______________________________ | | ☐ |

2. Was there anyone besides the respondent present during any part of the interview?

| % | | | |
|---|---|---|---|
| (62.1) | Yes . . . . . . . . [ANSWER A] . | [ ] | 1 |
| (37.9) | No. . . . . . . [SKIP TO Q.3] . | [ ] | 2 |

A. Who was present?

B. Did this create any problem?

| % | | | | |
|---|---|---|---|---|
| ( 6.7) | Yes . . . . . . . .[ANSWER C] . | [ ] | 1 |
| (55.6) | No. . . . . . . [SKIP TO Q.3] . | [ ] | 2 |
| (37.7) | N/A | | |

C. What kind of problem?

3. Did the respondent seem to understand the explanation of the incremental nature of the program?

| % | | | |
|---|---|---|---|
| (92.3) | Yes . . . . . . . . . . . . . . . . | [ ] | 1 |
| ( 5.2) | No. . . . . . . . . . . . . . . . . | [ ] | 2 |
| ( 0.6) | N/A | | |
| ( 1.9) | DK | | |

4. [USE THIS SPACE FOR ANY ADDITIONAL COMMENTS THAT MIGHT HELP US INTERPRET THE INFORMATION YOU COLLECT.]

RTI Project 23U-1169

O.M.B. No. 68-S-75048
Approval Expires 3/31/77

Study I.D.

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## CHILDREN'S INCREMENTAL DENTAL CARE STUDY

## TEACHER INTERVIEW SCHEDULE

Hello, I'm ____________________, an interviewer for the Research Triangle Institute in North Carolina. We are doing a study for the Federal Government's Health Resources Administration. The study concerns the children's dental care program in some of the local schools. The Privacy Act of 1974* requires that whenever information is collected about individuals as part of a study sponsored by the Federal Government, the person who is being asked to take part in the study be furnished the following information. --

The information which will be requested during this interview is to help the Health Resources Administration meet its responsibilities under the Public Health Service Act** which authorizes the Public Health Service to conduct research concerning dental care programs. The purpose of this study is to determine how parents, teachers, and school administrators feel about a dental care program in their schools. Your views, as well as those of the other participants, will be important to Congress when it evaluates national health proposals which include similar dental programs. However, I want you to know that all your answers are voluntary and you need not respond to any question to which you may object.

Please note that there are two numbers on this questionnaire that identify it for study purposes only, primarily to match data. At the conclusion of the study, the identification codes and the original questionnaire will be destroyed. The Health Resources Administration will receive only summaries of information, published in a statistical form so that the participants cannot be personally identified. I assure you that any information furnished by you will not be disclosed in any manner that identifies you to anyone outside the research study team.

Do you have any questions? O.K., let's begin the interview.

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* Section 3(e)(3)
** Section 301, 42 U.S.C. 241

TIME INTERVIEW BEGAN: ____________________ A.M. / P.M.

1. First, I'd like to know what grade you taught during the 1974-75 school year?

| % | | | Yes or No | |
|---|---|---|---|---|
| Yes | No | | Yes | No |
| (39.2) | (60.8) | First grade . . . . . . . . . . [ ] | 1 | 2 |
| (19.6) | (80.4) | Second grade. . . . . . . . . . [ ] | 1 | 2 |
| (20.6) | (79.4) | Third grade . . . . . . . . . . [ ] | 1 | 2 |
| (15.8) | (84.2) | Fourth grade. . . . . . . . . . [ ] | 1 | 2 |
| (20.1) | (79.9) | Fifth grade . . . . . . . . . . [ ] | 1 | 2 |
| (17.7) | (82.3) | Sixth grade . . . . . . . . . . [ ] | 1 | 2 |
| (10.0) | (90.0) | Other [SPECIFY ITEMS BELOW] . [ ] | | |

[TEACHING RESPONSIBILITY] ____________________ ☐☐

[GRADES INCLUDED] ____________________ ☐☐

2. How many years have you been teaching at your present school?

____________________

3. How many children were in your class during the 1974-75 school year?

____________________

---

Now I'd like to ask you some questions about the dental care program in your school during the 1974-75 school year.

4. As you know, some children in your school received free dental care that year. How many of the children in your class during 1974-75 received this free dental care?

____________________

5. How much do you know about that dental care program in your school? Do you know ...

| % | | |
|---|---|---|
| ( 6.2) | A lot,. . . . . . . . . . . . . [ ] | 1 |
| (45.5) | A moderate amount,. . . . . . . [ ] | 2 |
| (39.7) | Very little,. . . . . . . . . . [ ] | 3 |
| ( 8.6) | Nothing. . . . . . . . . . . . [ ] | 4 |

6. Who sponsored the children's dental care program in your school during the 1974-75 school year? Was it a ...

| % Yes | % No | | Yes | or | No |
|---|---|---|---|---|---|
| (11.0) | (89.0) | Headstart program,. . . . . . . [ ] | 1 | | 2 |
| (14.8) | (85.2) | Followthrough program,. . . . [ ] | 1 | | 2 |
| (46.4) | (53.6) | Title I program,. . . . . . . . [ ] | 1 | | 2 |
| ( 1.9) | (98.1) | Model Cities program, . . . . . [ ] | 1 | | 2 |
| (10.5) | (89.5) | Incremental Dental Health program,. . . . . . . . . . . . [ ] | 1 | | 2 |
| ( 2.4) | (97.6) | P.T.A. program, . . . . . . . . [ ] | 1 | | 2 |
| ( 3.3) | (96.7) | Emergency School Aid Act (ESAA) program, . . . . . . . . [ ] | 1 | | 2 |
| ( 6.7) | (93.3) | Other? [SPECIFY] . . . . . . . . [ ]<br>______________________________ ☐☐ | | | |
| (25.4) | (74.6) | Don't know. . . . . . . . . . . [ ] | 88 | | |

7. When children were taken from class to go to the dentist, did this disrupt the class in any way?

| % | | |
|---|---|---|
| (23.9) | Yes . . . . . . . . . [ASK A] . [ ] | 1 |
| (76.1) | No. . . . . . . . . . [ASK B] . [ ] | 2 |

A. In what ways did this disrupt the class?

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________ ☐☐

[IF A ASKED, SKIP TO Q.8]

B. What was done to prevent class disruption when children were taken from class to go to the dentist?

______________________________________________

______________________________________________

______________________________________________

______________________________________________ ☐☐

8. How long were most of the students normally gone from class? Would you say ...

%

(23.9) An hour or less,. . . . . . . . [ ] 1

(48.3) Half a morning or afternoon,. [ ] 2

(24.4) All morning or afternoon, . . [ ] 3

( - ) All day?. . . . . . . . . . . . [ ] 4

( 3.3) DK

9. Did any children fall behind in their work as a result of missing class to go to the dentist?

%

( 9.1) Yes . . . . . . . . . [ASK A] . [ ] 1

(88.5) No. . . . . .[SKIP TO Q.10] . [ ]-2

( 2.4) DK

A. Was this a serious problem for any of these children?

%

( 3.8) Yes . . . . . . . . . [ASK B] . [ ] 1

( 5.3) No. . . . . .[SKIP TO Q.10] . [ ] 2

(90.9) NA

B. Was it serious for ...

%

( - ) All of them,. . . . . . . . . . [ ] 1

( 1.4) Most of them, . . . . . . . . . [ ] 2

( 1.9) Some of them, . . . . . . . . . [ ] 3

( 0.5) Very few of them? . . . . . . . [ ] 4

(96.2) NA

10. How did most children receiving the dental care seem to feel about it? Did most of them like it, dislike it, or were they neutral?

%

(20.6) Liked it very much . . . . . . . [ ] 1

(48.3) Liked it . . . . . . . . . . . . . [ ] 2

(18.7) Didn't seem to care one way or the other . . . . . . . [ ] 3

(10.0) Disliked it. . . . . . . . . . . [ ] 4

( 0.5) Disliked it very much. . . . . . [ ] 5

( 1.9) DK

A. Why do you say they [RESPONSE GIVEN]?

________________________________________

________________________________________

________________________________________

________________________________________

11. Did taking them from class for dental care cause these children to be looked down upon by other children?

| % | | |
|---|---|---|
| ( - ) | Yes . . . . . . . . . [ASK A] . | [ ] 1 |
| (99.0) | No. . . . . . [SKIP TO Q.12] . | [ ] 2 |
| ( 1.0) | DK | |

A. Was this true for the ...

| % | | |
|---|---|---|
| ( - ) | Younger children (grades 1-3) or . . . . . . . . . | [ ] 1 |
| ( - ) | Older children (grades 4-6) or . . . . . . . . . | [ ] 2 |
| ( - ) | All the children in the program?. . . . . . . . . . . . | [ ] 3 |
| (100.0) | NA | |

12. How many parents showed concern about the program and their child's involvement by asking questions? Would you say ...

| % | | |
|---|---|---|
| ( 1.9) | All did, . . . . . . . . . . . . | [ ] 1 |
| (12.0) | Most did,. . . . . . . . . . . . | [ ] 2 |
| (40.2) | Some did,. . . . . . . . . . . . | [ ] 3 |
| (41.6) | None did?. . . . . . . . . . . . | [ ] 4 |
| ( 4.3) | Don't know . . . . . . . . . . . | [ ] 8 |

13. How did most of the children's parents seem to feel about the program? Did most of them like it, dislike it, or were they neutral?

| % | | |
|---|---|---|
| (23.9) | Liked it very much . . . . . . . | [ ] 1 |
| (42.6) | Liked it . . . . . . . . . . . . | [ ] 2 |
| (22.5) | Didn't seem to care one way or the other . . . . . . . | [ ] 3 |
| ( 0.5) | Disliked it. . . . . . . . . . . | [ ] 4 |
| ( - ) | Disliked it very much. . . . . . | [ ] 5 |
| ( 9.6) | DK | |
| ( 1.0) | Ref. | |

A. Why do you say they [RESPONSE GIVEN]?

______________________________________________

______________________________________________

______________________________________________

______________________________________________

14. How many parents complained about the program? Would you say ...

| % | | | |
|---|---|---|---|
| ( - ) | All did, . . . . . . . [ASK A] . | [ ] | 1 |
| ( - ) | Most did,. . . . . . . [ASK A] . | [ ] | 2 |
| (11.5) | Some did,. . . . . . . [ASK A] . | [ ] | 3 |
| (86.6) | None did?. . .[SKIP TO Q.15] . | [ ] | 4 |
| ( 1.9) | Don't know . .[SKIP TO Q.15] . | [ ] | 8 |

A. What were their complaints?

________________________________________

________________________________________

________________________________________

________________________________________ ☐☐

________________________________________ ☐☐

B. How many parents have complained to you?

| % | | |
|---|---|---|
| | [ACTUAL NUMBER] | Range<br>0 - 5 |
| ( 1.9) | NA | |
| ( 2.9) | DK | |

15. Parents of children in the dental care program can be characterized by the following attitudes about their child's participation in the program--they cared very much, they cared a little, they were neutral, or they didn't care at all. What was the distribution of these four attitudes among the parents you know about? Please make your total percent equal 100%.

[SHOW RESPONDENT THIS ANSWER BLOCK] ⟶

Parents who cared very much . . . . . . . . ______%

Parents who cared a little. . . . . . . . . ______%

Parents who were neutral. ______%

Parents who didn't care at all . . . . . . . ______%

100 %

16. Now I'd like to ask you about the quality of care the children received. As far as you know, did the dentists who treated the children give them the same quality of care you would expect a dentist to give his private patients?

| % | | |
|---|---|---|
| (87.1) | Yes . . . . . . . . . . . . . . . | [ ] 1 |
| ( 5.3) | No. . . . . . . . . . . . . . . | [ ] 2 |
| ( 7.2) | DK | |
| ( 0.5) | Ref. | |

17. How about your own feelings about the dental care program? Did you like it, dislike it, or were you neutral?

| % | | |
|---|---|---|
| (50.2) | Liked it very much . . . . . . . . | [ ] 1 |
| (43.5) | Liked it . . . . . . . . . . . . . | [ ] 2 |
| ( 2.4) | Didn't care one way or the other . . . . . . . . . . | [ ] 3 |
| ( 2.4) | Disliked it. . . . . . . . . . . | [ ] 4 |
| ( 1.0) | Disliked it very much. . . . . . | [ ] 5 |
| ( 0.5) | DK | |

A. Why did you [RESPONSE GIVEN]?

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________ ☐☐

---

Now I would like you to carefully read the next group of questions and to mark your answers yourself.

[HAND INTERVIEW SCHEDULE TO RESPONDENT.
POINT OUT Q.18 TO Q.33 TO RESPONDENT.]

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END CARD 1

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

18. Overall, would you say the program was ...

| % | | |
|---|---|---|
| (65.1) | Highly needed . . . . . . . . . | [ ] 1 |
| (27.3) | Needed. . . . . . . . . . . . . | [ ] 2 |
| ( 6.2) | Somewhat needed . . . . . . . . | [ ] 3 |
| ( 0.5) | Somewhat unneeded . . . . . . . | [ ] 4 |
| ( 1.0) | Unneeded. . . . . . . . . . . . | [ ] 5 |
| ( - ) | Highly unneeded . . . . . . . . | [ ] 6 |

19. Overall, would you say the program was ...

| % | | |
|---|---|---|
| (53.6) | Highly beneficial . . . . . . . | [ ] 1 |
| (38.3) | Beneficial. . . . . . . . . . . | [ ] 2 |
| ( 7.7) | Somewhat beneficial . . . . . . | [ ] 3 |
| ( - ) | Somewhat nonbeneficial. . . . . | [ ] 4 |
| ( 0.5) | Nonbeneficial . . . . . . . . . | [ ] 5 |
| ( - ) | Highly nonbeneficial. . . . . . | [ ] 6 |

20. Overall, would you say the program was ...

| % | | |
|---|---|---|
| (32.1) | Highly successful . . . . . . . | [ ] 1 |
| (50.7) | Successful. . . . . . . . . . . | [ ] 2 |
| (14.4) | Somewhat successful . . . . . . | [ ] 3 |
| ( 1.9) | Somewhat unsuccessful . . . . . | [ ] 4 |
| ( 0.5) | Unsuccessful. . . . . . . . . . | [ ] 5 |
| ( - ) | Highly unsuccessful . . . . . . | [ ] 6 |
| ( 0.5) | DK | |

Next, read each statement carefully. For each statement mark whether you strongly agree, agree, disagree, or strongly disagree with the statement.

| | Strongly Agree % | Agree % | Disagree % | Strongly Disagree % | DK % | Ref. % |
|---|---|---|---|---|---|---|
| 21. Most parents, whose children were in the dental care program, seemed to genuinely value dental health for their children. | (14.4)<br>1 | (56.5)<br>2 | (19.1)<br>3 | (6.2)<br>4 | (2.9) | (1.0) |
| 22. The children in the dental care program seemed to have better attitudes toward dentists than most other children. | (14.8)<br>1 | (48.8)<br>2 | (31.6)<br>3 | (3.8)<br>4 | (1.0) | ( - ) |

[GO ON TO NEXT PAGE]

| | | Strongly Agree % | Agree % | Disagree % | Strongly Disagree % | KD % | Ref. % |
|---|---|---|---|---|---|---|---|
| 23. | It should be a part of the school's job to be involved in providing dental services to children. | (22.0)<br>1 | (53.1)<br>2 | (15.8)<br>3 | ( 6.2)<br>4 | (1.9) | (1.0 |
| 24. | A child's dental problems interfere with his school work. | (33.5)<br>1 | (39.7)<br>2 | (18.7)<br>3 | ( 7.7)<br>4 | ( - ) | (0.5 |
| 25. | When dental care is free, it isn't as good as when you pay for it. | ( 3.3)<br>1 | ( 6.7)<br>2 | (58.4)<br>3 | (29.7)<br>4 | (1.0) | (1.0 |
| 26. | Most parents whose children were in the dental care program did not know the importance of dental care. | (16.7)<br>1 | (43.5)<br>2 | (34.0)<br>3 | ( 3.8)<br>4 | (1.0) | (1.0) |
| 27. | When the government is paying the bill, it should decide which children are eligible for care. | (11.0)<br>1 | (38.8)<br>2 | (35.9)<br>3 | (12.9)<br>4 | ( - ) | (1.4) |
| 28. | Most parents whose children were in the dental care program just wanted something for nothing. | ( 3.3)<br>1 | ( 9.6)<br>2 | (66.0)<br>3 | (19.6)<br>4 | (1.0) | (0.5) |
| 29. | Parents didn't have any right to question what was happening in the program because they were not paying for the dental care. | ( 2.9)<br>1 | ( 1.9)<br>2 | (63.6)<br>3 | (30.6)<br>4 | (0.5) | (0.5) |
| 30. | Most parents whose children were in the dental care program would have liked to have been able to choose a dentist for their child rather than having one assigned. | ( 1.4)<br>1 | (12.0)<br>2 | (73.2)<br>3 | ( 8.6)<br>4 | (3.8) | (1.0) |
| 31. | The program dentists could be trusted to do what needed to be done for each child. | (23.4)<br>1 | (69.4)<br>2 | ( 3.3)<br>3 | ( 1.0)<br>4 | (2.4) | (0.5) |
| 32. | Most parents whose children were in the dental care program did not pay much attention to what happened to their children. | ( 6.2)<br>1 | (28.2)<br>2 | (56.0)<br>3 | ( 5.3)<br>4 | (3.8) | (0.5) |
| 33. | Most parents whose children were in the dental care program looked to the school to provide for all their child's health needs. | ( 8.1)<br>1 | (38.3)<br>2 | (48.3)<br>3 | (3.3)<br>4 | (1.0) | (1.0) |

34. Let's go a step further with the last item you responded to. Did parents whose children were in the dental care program expect the school to look after and take care of the child in ways that are beyond the scope of the school's responsibility?

| % | | |
|---|---|---|
| (43.1) | Yes . . . . . . . . . [ASK A] . | [ ] 1 |
| (55.0) | No. . . . . .[SKIP TO Q.35] . | [ ] 2 |
| ( 1.4) | DK | |
| ( 0.5) | Ref. | |

A. Compared to other parents, did the parents with children in the dental program expect more, about the same, or less help from the school?

| % | | |
|---|---|---|
| (31.1) | More. . . . . . . . . . . . . . | [ ] 1 |
| (10.0) | About the same. . . . . . . . . | [ ] 2 |
| ( 1.0) | Less. . . . . . . . . . . . . . | [ ] 3 |
| (56.9) | NA | |
| ( 1.0) | DK | |

35. Going back to the program itself, would you say that most people who knew about the program considered it tax dollars well spent or wasted.

| % | | |
|---|---|---|
| (78.5) | Well spent. . . . . [ASK A] . | [ ] 1 |
| ( 8.6) | Wasted. . . . . . . [ASK A] . | [ ] 2 |
| (12.9) | Don't know. .[SKIP TO Q.36] . | [ ] 8 |

A. Why do you think they said the tax dollars were [RESPONSE GIVEN]?

36. Would you recommend to other teachers the establishment of a similar program in their schools?

| % | | |
|---|---|---|
| (90.9) | Yes . . . . . . . . . . . . . . . . | [ ] 1 |
| ( 7.7) | No. . . . . . . . . . . . . . . . . | [ ] 2 |
| ( 1.4) | DK | |

A. Why would you (recommend/not recommend) it?

____________________________________________

____________________________________________

____________________________________________

____________________________________________ ☐☐

---

[INTRODUCTION TO INCREMENTAL CHART]

Now I'd like to talk to you about how the school dental care program
worked. Although you may already know about this, let me briefly go
through the explanation. On this chart [SHOW CHART] we have figures
with and without toothbrushes to represent children in the six grades of [1]
an elementary school. The first grade is on the left here [POINT TO
FIRST GRADE COLUMN], the second grade is next, the third grade, fourth
grade, fifth grade, and over here on the right is the sixth grade [POINT [2]
TO SUCCESSIVE COLUMNS GOING FROM LEFT TO RIGHT]. Now, each row here
[POINT TO THE ROWS IN SUCCESSION AS YOU EXPLAIN] represents a school
year for the program. At the top is the first year of the program, [3]
below it is the second year, the third year, the fourth year of the
program, the fifth year, and the sixth year of the program.

O.K. Here is how the program worked. In the first year of the
program, only eligible first graders were given dental care in the [4]
program, as shown by the figure with the toothbrush [POINT TO YEAR ONE
FIGURE WITH TOOTHBURSH]. Notice that the children in grades two through
six don't have toothbrushes since they were not included in the program. [5]

In the second year [POINT TO SECOND YEAR ROW], the children who were in the first grade moved to the second grade [POINT TO THE TRANSITION ARROW] and were still in the program. Also, in the second year, the new first graders [POINT] eligible for the program got dental care in the program. But, children in grades three through six [POINT] weren't included in the program.

In the third year [POINT], the second-year first graders moved to second grade [POINT] and the second-year second graders moved to third grade [POINT] and both these eligible groups remained in the program. In addition [POINT TO THIRD YEAR ROW], a new group of eligible first graders entered the program. Now there were three grades of children in the program in the third year [POINT], and three grades of children who were not included in the program [POINT]. As you can see from the chart, this procedure of getting children into the program continued each year. O.K., is that clear enough or should I give some more examples? [CONTINUE EXPLANATION OR REPEAT EXPLANATION IF REQUESTED.]

---

37. Now that I have explained how the program worked, did you already know about it or is this new to you?

| % | | | |
|---|---|---|---|
| (35.9) | Knew already. . . . . . . . . . | [ ] | 1 |
| (64.1) | Didn't know . . . . . . . . . . | [ ] | 8 |

38. Do you find this way of running the program ...

| % | | | |
|---|---|---|---|
| (11.0) | Highly acceptable,. . . . . . . . . . . . . .[SKIP TO Q.39] . | [ ] | 1 |
| (56.0) | Acceptable, .[SKIP TO Q.39] . | [ ] | 2 |
| (29.7) | Unacceptable, . . . [ASK A] . | [ ] | 3 |
| ( 3.3) | Highly unacceptable?[ASK A] . | [ ] | 4 |

A. What would make it acceptable to you?

39. If you will look at the chart again [SHOW CHART], you will notice that for the first year of the program, if a family had a child in the first grade and a child in the third grade, then only the first grader would get in the program, but not the third grader. Or, another example, if a family had a child in any grade, two through six, that child would not get in the program, but if a family had a child in the first grade, that child could get in the program. [PAUSE] Did you hear any complaints about this way of running the program from parents?

| % | | | |
|---|---|---|---|
| (15.3) | Yes . . . . . . . . . [ASK A] . | ☐ | 1 |
| (84.7) | No. . . . [SKIP TO CLOSING STATEMENT] . | ☐ | 2 |

A. Did all, most, or some of the parents complain about this feature of the program?

| % | | | |
|---|---|---|---|
| ( - ) | All . . . . . . . . . . . . . . . | ☐ | 1 |
| ( 1.4) | Most. . . . . . . . . . . . . . . | ☐ | 2 |
| (13.9) | Some. . . . . . . . . . . . . . . | ☐ | 3 |
| (84.7) | NA | | |

B. Were these complaints ...

| % | | | |
|---|---|---|---|
| ( - ) | Extremely bitter, . . . . . . . | ☐ | 1 |
| ( 0.5) | Very bitter,. . . . . . . . . . | ☐ | 2 |
| ( 5.7) | Slightly bitter,. . . . . . . . | ☐ | 3 |
| ( 9.1) | Not bitter? . . . . . . . . . . | ☐ | 4 |
| (84.7) | NA | | |

---

[CLOSING STATEMENT]

That's all the questions I have. Thank you very much for your time and cooperation. Your answers have been very helpful.

---

TIME INTERVIEW ENDED: ______________________________ A.M. / P.M.

[PLEASE COMPLETE THE INTERVIEWER'S REMARKS IMMEDIATELY AFTER YOU LEAVE THE RESPONDENT]

## INTERVIEWER REMARKS

[TO BE FILLED OUT IMMEDIATELY AFTER YOU HAVE COMPLETED THE INTERVIEW AND LEFT THE RESPONDENT]

DATE INTERVIEW COMPLETED: ____/____/ 77
mo. day year

[HOW LONG DID THE INTERVIEW TAKE?________________MINUTES]

1. Sex of respondent

| % | | |
|---|---|---|
| ( 9.1) | Male. . . . . . . . . . . . . . . . | [ ] 1 |
| (90.9) | Female. . . . . . . . . . . . . . | [ ] 2 |

2. Race of respondent

| % | | |
|---|---|---|
| (79.4) | White, not Spanish-speaking. . . . . . . . | [ ] 1 |
| (20.6) | Black, not Spanish-speaking. . . . . . . . | [ ] 2 |
| ( - ) | Hispanic descent (i.e., speaks Spanish). . . . . | [ ] 3 |
| ( - ) | Asian or Pacific Islander. . . . . . . . | [ ] 4 |
| ( - ) | American Indian . . . . . . . . | [ ] 5 |
| ( - ) | Other [SPECIFY] . . . . . . . .<br>____________________________________ | [ ]<br>☐ |

3. Was there anyone besides the respondent present during any part of the interview?

%
(43.5) Yes . . . . . . . .[ANSWER A] . [ ] 1
(56.5) No. . . . . . . [SKIP TO Q.4] . [ ] 2

A. Who was present?

B. Did this create any problems?

%
( 5.3) Yes . . . . . . . .[ANSWER C] . [ ] 1
(38.3) No. . . . . . . [SKIP TO Q.4] . [ ] 2
(56.5) NA

C. What kind of problem?

4. [USE THIS SPACE FOR ANY ADDITIONAL COMMENTS THAT MIGHT HELP US INTERPRET THE INFORMATION YOU COLLECTED.]

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END CARD 2

RTI Project 23U-1169

O.M.B. No. 68-S-75048
Approval Expires 3/31/77

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Study I.D. | 1 | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

# CHILDREN'S INCREMENTAL DENTAL CARE STUDY

## ADMINISTRATOR INTERVIEW SCHEDULE

Hello, I'm ____________________, an interviewer for the Research Triangle Institute in North Carolina. We are doing a study for the Federal Government's Health Resources Administration. The study concerns the children's dental care program in some of the local schools. The Privacy Act of 1974* requires that whenever information is collected about individuals as part of a study sponsored by the Federal Government, the person who is being asked to take part in the study be furnished the following information.

The information which will be requested during this interview is to help the Health Resources Administration meet its responsibilities under the Public Health Service Act** which authorizes the Public Health Service to conduct research concerning dental care programs. The purpose of this study is to determine how parents, teachers, and school administrators feel about a dental care program in their schools. Your views, as well as those of the other participants, will be important to Congress when it evaluates national health proposals which include similar dental programs. However, I want you to know that all your answers are voluntary and you need not respond to any question to which you may object.

Please note that there are two numbers on this questionnaire that identify it for study purposes only, primarily to match data. At the conclusion of the study, the identification codes and the original questionnaire will be destroyed. The Health Resources Administration will receive only summaries of information, published in a statistical form so that the participants cannot be personally identified. I assure you that any information furnished by you will not be disclosed in any manner that identifies you to anyone outside the research study team.

Do you have any questions? O.K., let's begin the interview.

---

* Section 3(e)(3)
** Section 301, 42 U.S.C. 241

THIS IS AN INTERVIEW WITH A:

| | | |
|---|---|---|
| SCHOOL PRINCIPAL | [ ] | 4 |
| HEALTH COORDINATOR | [ ] | 5 |
| SCHOOL SUPERINTENDENT | [ ] | 6 |
| OTHER [SPECIFY] | [ ] | 7 |

______________________

TIME INTERVIEW BEGAN: ______________________ A.M. P.M.

1. First, I'd like to know how long you have been a [SCHOOL PRINCIPAL / HEALTH COORDINATOR / SCHOOL SUPERINTENDENT] here?

______________________

[USE "SCHOOL" WITH PRINCIPALS AND "SCHOOL SYSTEM" WITH SUPERINTENDENTS AND HEALTH COORDINATORS.]

2. What percent of your school's (school system's) families are poverty families?

[PERCENT] ______________________

---

Now I'd like to ask you some questions about the dental care program in your school (school system) during the 1974-75 school year.

[USE "SCHOOL" WITH PRINCIPALS AND "SCHOOL SYSTEM" WITH SUPERINTENDENTS AND HEALTH COORDINATORS.]

3. How much do you know about that dental care program in your school (school system)? Do you know ...

| % | | | | |
|---|---|---|---|---|
| P(27.6) | A(42.3) | A lot, . . . . . . . . . . . . . | [ ] | 1 |
| (60.3) | (38.5) | A moderate amount, . . . . . . . | [ ] | 2 |
| (12.1) | (19.2) | Very little, . . . . . . . . . . | [ ] | 3 |
| ( - ) | ( - ) | Nothing? . . . . . . . . . . . . | [ ] | 4 |

4. Who sponsored the children's dental care program in your school (school system) during the 1974-75 year? Was it a ...

| % | | | | | | |
|---|---|---|---|---|---|---|
| Yes | No | Yes | No | | **Yes** or | **No** |
| P( 8.6) | (91.4) | A(19.2) | ( 80.8) | Headstart program, . . . . . . . [ ] | 1 | 2 |
| (15.5) | (84.5) | (11.5) | ( 88.5) | Followthrough program, . . . . [ ] | 1 | 2 |
| (37.9) | (62.1) | (26.9) | ( 73.1) | Title I program, . . . . . . . . [ ] | 1 | 2 |
| ( 1.7) | (98.3) | ( - ) | (100.0) | Model Cities program,. . . . . [ ] | 1 | 2 |
| (25.9) | (74.1) | (42.3) | ( 57.7) | Incremental Dental Health program, . . . . . . . . . . . [ ] | 1 | 2 |
| ( 1.7) | (98.3) | ( 3.8) | ( 96.2) | P.T.A. program, . . . . . . . . [ ] | 1 | 2 |
| ( 6.9) | (93.1) | ( 7.7) | ( 92.3) | Emergency School Aid Act (ESAA) program,. . . . . . . . . [ ] | 1 | 2 |
| | | | | Other? [SPECIFY] . . . . . . . . [ ] | | |
| P(10.3) | | A( 3.8) | | Don't know . . . . . . . . . . . [ ] | 88 | |
| (89.7) | | (96.2) | | NA | | |

5. How well did the administration of the dental care program fit in with your school's (school system's) everyday operation? Did it fit ...

| % | | | |
|---|---|---|---|
| P(55.2) | A(53.8) | Very well,. . . . . . . . . . . [ ] | 1 |
| (36.2) | (38.5) | Well, . . . . . . . . . . . . . [ ] | 2 |
| ( 6.9) | ( - ) | Poorly, . . . . . . . . . . . . [ ] | 3 |
| ( - ) | ( 3.8) | Very poorly?. . . . . . . . . . [ ] | 4 |
| ( 1.7) | ( 3.8) | DK | |

6. Do you feel you were given enough information about the program?

| % | | | |
|---|---|---|---|
| P(63.8) | A(92.3) | Yes . . [SKIP TO Q.7] . . . . [ ] | 1 |
| (36.2) | ( 7.7) | No. . . [ASK A] . . . . . . . . [ ] | 2 |

A. What would you have liked to know?

7. Now we'd like to know whether or not the dental program burdened any of your school (school system) resources. Was the dental program a burden on your staff time?

| % | | |
|---|---|---|
| P(15.5) | A(19.2) | Yes . . . . . . . . . [ASK A] . [ ] 1 |
| (84.5) | (80.8) | No. . . . . . [SKIP TO Q.8] . [ ] 2 |

A. Was it unduly burdensome on your staff time?

| % | | |
|---|---|---|
| P( 3.4) | A( 3.8) | Yes . . . . . . . . . [ASK B] . [ ] 1 |
| (12.1) | (15.4) | No. . . . . . [SKIP TO Q.8] . [ ] 2 |
| (84.5) | (80.8) | NA |

B. How was the program an undue burden on your staff time?

______________________________

______________________________

______________________________

______________________________ [ | ]

8. Was the dental program a burden on your class time?

| % | | |
|---|---|---|
| P(24.1) | A(23.1) | Yes . . . . . . . . . [ASK A] . [ ] 1 |
| (75.9) | (76.9) | No. . . . . . [SKIP TO Q.9] . [ ] 2 |

A. Was it unduly burdensome on your class time?

| % | | |
|---|---|---|
| P( 3.4) | A( - ) | Yes . . . . . . . . . [ASK B] . [ ] 1 |
| (20.7) | (23.1) | No. . . . . . [SKIP TO Q.9] . [ ] 2 |
| (75.9) | (76.9) | NA |

B. How was the program an undue burden on your class time?

______________________________

______________________________

______________________________

______________________________

______________________________ [ | ]

9. Was the dental program a burden on your budget?

| % | | | |
|---|---|---|---|
| P( 1.7) | A( 3.8) | Yes . . . . . . . . . [ASK A] . [ ] 1 | |
| (98.3) | (96.2) | No. . . . . .[SKIP TO Q.10] . [ ] 2 | |

A. Was it unduly burdensome on your budget?

| % | | | |
|---|---|---|---|
| P( - ) | A( - ) | Yes . . . . . . . . . [ASK B] . [ ] 1 | |
| ( 1.7) | ( 3.8) | No. . . . . .[SKIP TO Q.10] . [ ] 2 | |
| (98.3) | (96.2) | NA | |

B. How was the program an undue burden on your budget?

10. Was the dental program a burden on your transportation facilities?

| % | | | |
|---|---|---|---|
| P( 8.6) | A(26.9) | Yes . . . . . . . . . [ASK A] . [ ] 1 | |
| (91.4) | (73.1) | No. . . . . .[SKIP TO Q.11] . [ ] 2 | |

A. Was it unduly burdensome on your transportation facilities?

| % | | | |
|---|---|---|---|
| P( 1.7) | A( 3.8) | Yes . . . . . . . . . [ASK B] . [ ] 1 | |
| ( 6.9) | (23.1) | No. . . . . .[SKIP TO Q.11] . [ ] 2 | |
| (91.4) | (73.1) | NA | |

B. How was the program an undue burden on your transportation facilities?

11. Was the dental program a burden on any other resources [SPECIFY]?

| % | | | |
|---|---|---|---|
| P( 1.7) | A( - ) | Yes . . . [SPECIFY & ASK A] . [ ] 1 | |
| | | ________________________________ | |
| (98.3) | (100.0) | No. . . . . . [SKIP TO Q.12] . [ ] 2 | ☐☐ |

A. Was it unduly burdensome on your [OTHER RESOURCE]?

Yes . . . . . . . . . [ASK B] . [ ] 1
No. . . . . . [SKIP TO Q.12] . [ ] 2

B. How was the program an undue burden on your [OTHER RESOURCE]?

________________________________________________

________________________________________________

________________________________________________

________________________________________________ ☐☐

________________________________________________ ☐☐

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12. What sorts of complaints have you heard about the program?

[ASCERTAIN WHO COMPLAINED AND
THE NATURE OF THE COMPLAINT.]

________________________________________________

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________________________________________________ ☐☐

________________________________________________ ☐☐

13. How did most of your teachers feel about the program? Did they like it, dislike it, or were they neutral?

| % | | | | |
|---|---|---|---|---|
| P(31.0) | A(30.8) | Liked it very much . . . . . . . | [ ] | 1 |
| (51.7) | (53.8) | Liked it . . . . . . . . . . . . | [ ] | 2 |
| (12.1) | ( 7.7) | Didn't seem to care one way or the other . . . . . . . . | [ ] | 3 |
| ( - ) | ( - ) | Disliked it. . . . . . . . . . . | [ ] | 4 |
| ( - ) | ( - ) | Disliked it very much. . . . . . | [ ] | 5 |
| ( 3.4) | ( 7.7) | DK | | |
| ( 1.7) | ( - ) | Ref. | | |

A. Why do you say they [RESPONSE GIVEN]?

14. When children were taken from class to go to the dentist, did this disrupt the class in any way?

| % | | | | | |
|---|---|---|---|---|---|
| P(39.7) | A(23.1) | Yes . . . . . . . . . | [ASK A] . | [ ] | 1 |
| (60.3) | (65.4) | No. . . . . . . . . . | [ASK B] . | [ ] | 2 |
| ( - ) | (11.5) | DK | | | |

A. In what ways did this disrupt the class?

[IF A ASKED, SKIP TO Q.15]

B. What was done to prevent class disruption when children were taken from class to go to the dentist?

15. How long were most of the students normally gone from class? Would you say ...

| % | | | |
|---|---|---|---|
| P(24.1) | A(42.3) | An hour or less,. . . . . . . . [ ] | 1 |
| (60.3) | (26.9) | Half a morning or afternoon,. [ ] | 2 |
| (15.5) | (15.4) | All morning or afternoon, . . [ ] | 3 |
| ( - ) | ( - ) | All day?. . . . . . . . . . . . . [ ] | 4 |
| ( - ) | (15.4) | DK | |

16. Did any children fall behind in their work as a result of missing class to go to the dentist?

| % | | | |
|---|---|---|---|
| P( 1.7) | A( - ) | Yes . . . . . . . . . [ASK A] . [ ] | 1 |
| (94.8) | (96.2) | No. . . . . .[SKIP TO Q.17] . [ ] | 2 |
| ( 3.4) | ( 3.8) | DK | |

A. Was this a serious problem for any of these children?

| % | | | |
|---|---|---|---|
| P( - ) | A( - ) | Yes . . . . . . . . . [ASK B] . [ ] | 1 |
| ( 1.7) | ( - ) | No. . . . . .[SKIP TO Q.17] . [ ] | 2 |
| (98.3) | (100.0) | NA | |

B. Was it serious for ...

| % | | | |
|---|---|---|---|
| P( - ) | A( - ) | All of them,. . . . . . . . . . . [ ] | 1 |
| ( - ) | ( - ) | Most of them, . . . . . . . . . [ ] | 2 |
| ( - ) | ( - ) | Some of them, . . . . . . . . . [ ] | 3 |
| ( - ) | ( - ) | Very few of them? . . . . . . . [ ] | 4 |
| (100.0) | (100.0) | NA | |

17. How did most children receiving the dental care seem to feel about it? Did most of them like it, dislike it, or were they neutral?

| % | | | |
|---|---|---|---|
| P(17.2) | A(11.5) | Liked it very much . . . . . . . [ ] | 1 |
| (69.0) | (50.0) | Liked it . . . . . . . . . . . . . [ ] | 2 |
| (10.3) | (11.5) | Didn't seem to care one way or the other . . . . . . . . [ ] | 3 |
| ( 3.4) | ( 7.7) | Disliked it. . . . . . . . . . . [ ] | 4 |
| ( - ) | ( - ) | Disliked it very much. . . . . [ ] | 5 |
| ( - ) | (19.2) | DK | |

A. Why do you say they [RESPONSE GIVEN]?

________________________________________

________________________________________

________________________________________

OFFICE USE ONLY

END CARD 1

OFFICE USE ONLY

| 2 | | | | | | |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

18. Did taking them from class for dental care cause these children to be looked down upon by other children?

| % | | | |
|---|---|---|---|
| P( 1.7) | A( - ) | Yes . . . . . . . . . [ASK A] . [ ] | 1 |
| (96.6) | (96.2) | No. . . . . . [SKIP TO Q.19] . [ ] | 2 |
| ( 1.7) | ( 3.8) | DK | |

A. Was this true for the ...

| % | | | |
|---|---|---|---|
| P( - ) | A( - ) | Younger children (grades 1-3) or . . . . . . . . . . [ ] | 1 |
| ( 1.7) | ( - ) | Older children (grades 4-6) or . . . . . . . . . [ ] | 2 |
| ( - ) | ( - ) | All the children in the program?. . . . . . . . . . . . . [ ] | 3 |
| (98.3) | (100.0) | NA | |

19. How many parents showed concern about the program and their child's involvement by asking questions? Would you say ...

| % | | | |
|---|---|---|---|
| P( 3.4) | A( - ) | All did, . . . . . . . . . . . [ ] | 1 |
| (12.1) | (15.4) | Most did, . . . . . . . . . . . [ ] | 2 |
| (79.3) | (53.8) | Some did, . . . . . . . . . . . [ ] | 3 |
| ( 3.4) | ( 7.7) | None did? . . . . . . . . . . . [ ] | 4 |
| ( 1.7) | (23.1) | Don't know. . . . . . . . . . . [ ] | 8 |

20. How did most of the children's parents seem to feel about the program? Did most of them like it, dislike it, or are they neutral?

| % | | | |
|---|---|---|---|
| P(43.1) | A(19.2) | Liked it very much . . . . . . . [ ] | 1 |
| (41.4) | (73.1) | Liked it . . . . . . . . . . . . . [ ] | 2 |
| (15.5) | ( - ) | Didn't seem to care one way or the other . . . . . . . . [ ] | 3 |
| ( - ) | ( - ) | Disliked it. . . . . . . . . . . . [ ] | 4 |
| ( - ) | ( - ) | Disliked it very much. . . . . [ ] | 5 |
| ( - ) | ( 7.7) | DK | |

A. Why do you say they [RESPONSE GIVEN]?

________________________________________

________________________________________

________________________________________

________________________________________

21. How many parents complained about the program? Would you say ...

%

| | | | |
|---|---|---|---|
| F( - ) | A( - ) | All did, . . . . . . . [ASK A] . [ ] | 1 |
| ( - ) | ( - ) | Most did,. . . . . . . [ASK A] . [ ] | 2 |
| (32.8) | (23.1) | Some did,. . . . . . . [ASK A] . [ ] | 3 |
| (67.2) | (73.1) | None did?. . . [SKIP TO Q.22] . [ ] | 4 |
| ( - ) | ( 3.8) | Don't know . . [SKIP TO Q.22] . [ ] | 8 |

A. What were their complaints?

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________

B. How many parents have complained to you?

[ACTUAL NUMBER] ________________

22. Parents of children in the dental care program can be characterized by the following attitudes about their child's participation in the program--they cared very much, they cared a little, they were neutral, or they didn't care at all. What was the distribution of these four attitudes among the parents you know about? Please make your total percent equal 100%.

[SHOW RESPONDENT THIS ANSWER BLOCK] ⟶

Parents who cared very much . . . . . . . . . ______%

Parents who cared a little. . . . . . . . . . ______%

Parents who were neutral. ______%

Parents who didn't care at all . . . . . . . . ______%

100 %

23. Now I'd like to ask you about the quality of care the children received. As far as you know, did the dentists who treated the children give them the same quality of care you would expect a dentist to give his private patients?

| % | | | |
|---|---|---|---|
| P(86.2) | A(92.3) | Yes . . . . . . . . . . . . . . . | ☐ 1 |
| ( 8.6) | ( - ) | No. . . . . . . . . . . . . . . . | ☐ 2 |
| ( 5.2) | ( 7.7) | DK | |

24. How about your own feelings about the dental care program? Did you like it, dislike it, or were you neutral?

| % | | | |
|---|---|---|---|
| P(65.5) | A(80.8) | Liked it very much . . . . . . . | ☐ 1 |
| (32.8) | (19.2) | Liked it . . . . . . . . . . . . | ☐ 2 |
| ( 1.7) | ( - ) | Didn't care one way or the other . . . . . . . . . . | ☐ 3 |
| ( - ) | ( - ) | Disliked it. . . . . . . . . . . | ☐ 4 |
| ( - ) | ( - ) | Disliked it very much. . . . . | ☐ 5 |

A. Why did you [RESPONSE GIVEN]?

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________ ☐☐

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Now I would like you to carefully read the next group of questions and to mark your answers yourself.

[HAND INTERVIEW SCHEDULE TO RESPONDENT.
POINT OUT Q.25 TO Q.40 TO RESPONDENT.]

25. Overall, would you say the program was ...

| % | | | |
|---|---|---|---|
| P(81.0) | A(69.2) | Highly needed . . . . . . . . . [ ] | 1 |
| (19.0) | (30.8) | Needed. . . . . . . . . . . . . [ ] | 2 |
| ( - ) | ( - ) | Somewhat needed . . . . . . . . [ ] | 3 |
| ( - ) | ( - ) | Somewhat unneeded . . . . . . . [ ] | 4 |
| ( - ) | ( - ) | Unneeded. . . . . . . . . . . . [ ] | 5 |
| ( - ) | ( - ) | Highly unneeded . . . . . . . . [ ] | 6 |

26. Overall, would you say the program was ...

| % | | | |
|---|---|---|---|
| P(65.5) | A(65.4) | Highly beneficial . . . . . . . [ ] | 1 |
| (29.3) | (34.6) | Beneficial. . . . . . . . . . . [ ] | 2 |
| ( 5.2) | ( - ) | Somewhat beneficial . . . . . . [ ] | 3 |
| ( - ) | ( - ) | Somewhat nonbeneficial. . . . . [ ] | 4 |
| ( - ) | ( - ) | Nonbeneficial . . . . . . . . . [ ] | 5 |
| ( - ) | ( - ) | Highly nonbeneficial. . . . . . [ ] | 6 |

27. Overall, would you say the program was ...

| % | | | |
|---|---|---|---|
| P(39.7) | A(57.7) | Highly successful . . . . . . . [ ] | 1 |
| (46.6) | (42.3) | Successful. . . . . . . . . . . [ ] | 2 |
| (13.8) | ( - ) | Somewhat successful . . . . . . [ ] | 3 |
| ( - ) | ( - ) | Somewhat unsuccessful . . . . . [ ] | 4 |
| ( - ) | ( - ) | Unsuccessful. . . . . . . . . . [ ] | 5 |
| ( - ) | ( - ) | Highly unsuccessful . . . . . . [ ] | 6 |

Next, read each statement carefully. For each statement mark whether you strongly agree, agree, disagree, or strongly disagree with the statement.

| | | Strongly Agree | Agree | Disagree | Strongly Disagree | Don't Know |
|---|---|---|---|---|---|---|
| 28. Most parents, whose children were in the dental care program, seemed to genuinely value dental health for their children. | P | 27.6 | 60.3 | 12.1 | - | - |
| | A | 19.2 | 50.0 | 23.1 | 3.8 | 3.8 |
| | | 1 | 2 | 3 | 4 | 8 |
| 29. The children in the dental care program seemed to have better attitudes toward dentists than most other children. | P | 6.9 | 58.6 | 31.0 | - | 3.4 |
| | A | 19.2 | 53.8 | 23.1 | - | 3.8 |
| | | 1 | 2 | 3 | 4 | 8 |

[GO ON TO NEXT PAGE]

| | | | Strongly Agree | Agree | Disagree | Strongly Disagree | Don't Know |
|---|---|---|---|---|---|---|---|
| 30. | It should be a part of the school's job to be involved in providing dental services to children. | P | (15.5) | (58.6) | (22.4) | ( - ) | ( 1.7) |
| | | A | (15.4) | * (50.0) | (30.8) | ( 3.8) | ( - ) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 31. | A child's dental problems interfere with his school work. | P | (41.4) | (36.2) | (13.8) | ( 8.6) | ( - ) |
| | | A | (61.5) | (30.8) | ( 7.7) | ( - ) | ( - ) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 32. | When dental care is free, it isn't as good as when you pay for it. | P | ( - ) | ( 3.4) | (60.3) | (34.5) | ( 1.7) |
| | | A | ( - ) | (19.2) | (42.3) | (38.5) | ( - ) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 33. | Most parents whose children were in the dental care program did not know the importance of dental care. | P | ( 5.2) | (41.4) | (44.8) | ( 6.9) | ( 1.7) |
| | | A | (11.5) | (61.5) | (23.1) | ( – ) | ( 3.8) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 34. | When the government is paying the bill, it should decide which children are eligible for care. | P | ( 8.6) | (29.3) | (36.2) | (24.1) | ( 1.7) |
| | | A | ( 7.7) | (34.6) | (50.0) | ( 7.7) | ( - ) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 35. | Most parents whose children were in the dental care program just wanted something for nothing. | P | ( - ) | ( 8.6) | (58.6) | (32.8) | ( - ) |
| | | A | ( - ) | ( 3.8) | (69.2) | (26.9) | ( - ) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 36. | Parents didn't have any right to question what was happening in the program because they were not paying for the dental care. | P | ( 1.7) | ( 3.4) | (46.6) | (48.3) | ( - ) |
| | | A | ( - ) | ( - ) | (50.0) | (50.0) | ( - ) |
| | | | 1 | 2 | 3 | [illegible] | 8 |
| 37. | Most parents whose children were in the dental care program would have liked to have been able to choose a dentist for their child rather than having one assigned. | P | ( 5.2) | (20.7) | (69.0) | ( 3.4) | ( 1.7) |
| | | A | ( - ) | (15.4) | (76.9) | ( 7.7) | ( - ) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 38. | The program dentists could be trusted to do what needed to be done for each child. | P | (24.1) | (75.9) | ( - ) | ( - ) | ( - ) |
| | | A | (30.8) | * (65.4) | ( - ) | ( - ) | ( - ) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 39. | Most parents whose children were in the dental care program did not pay much attention to what happened to their children. | P | ( - ) | (15.5) | (72.4) | (10.3) | ( 1.7) |
| | | A | ( - ) | (19.2) | (61.5) | (11.5) | ( 7.7) |
| | | | 1 | 2 | 3 | 4 | 8 |
| 40. | Most parents whose children were in the dental care program looked to the school to provide for all their child's health needs. | P | ( - ) | (43.1) | (56.9) | ( - ) | ( - ) |
| | | A | (11.5) | (50.0) | (30.8) | ( 7.7) | ( - ) |
| | | | 1 | 2 | 3 | 4 | 8 |

---

30 A(1.7)
Ref.

38 A(3.8)
Ref.

41. Let's go a step further with the last item you responded to. Did parents whose children were in the dental care program expect the school to look after and take care of the child in ways that are beyond the scope of the school's responsibility?

| % | | |
|---|---|---|
| P(48.3) | A(69.2) | Yes . . . . . . . . . [ASK A] . [ ] 1 |
| (51.7) | (30.8) | No. . . . . . .[SKIP TO Q.42] . [ ] 2 |

A. Compared to other parents, did the parents with children in the dental program expect more, about the same, or less help from the school?

| % | | |
|---|---|---|
| P(37.9) | A(46.2) | More. . . . . . . . . . . . . . . [ ] 1 |
| (10.3) | (23.1) | About the same. . . . . . . . . [ ] 2 |
| ( - ) | ( - ) | Less. . . . . . . . . . . . . . . [ ] 3 |
| (51.7) | (30.8) | NA |

42. Going back to the program itself, would you say that most people who knew about the program considered it tax dollars well spent or wasted.

| % | | |
|---|---|---|
| P(91.4) | A(100.0) | Well spent. . . . . [ASK A] . [ ] 1 |
| ( 3.4) | ( - ) | Wasted. . . . . . . . [ASK A] . [ ] 2 |
| ( 5.2) | ( - ) | Don't know. .[SKIP TO Q.43] . [ ] 8 |

A. Why do you think they said the tax dollars were [RESPONSE GIVEN]?

☐☐

[MATCH THE RESPONDENT'S ADMINISTRATIVE
POSITION WHEN YOU ASK THIS QUESTION.]

43. Would you recommend to other [SCHOOL SUPERINTENDENTS / SCHOOL PRINCIPALS / HEALTH COORDINATORS] the establishment of a similar program in their schools (school systems)?

| % P | % A | | | |
|---|---|---|---|---|
| P(94.8) | A(92.3) | Yes . . . . . . . . . . . . . . . | [ ] | 1 |
| ( 5.2) | ( 7.7) | No. . . . . . . . . . . . . . . . | [ ] | 2 |

A. Why would you (recommend/not recommend) it?

______________________________________________

______________________________________________

______________________________________________

______________________________________________

______________________________________________ ☐☐

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[INTRODUCTION TO INCREMENTAL CHART]

Now I'd like to talk to you about how the school dental care program worked. Although you may already know about this, let me briefly go through the explanation. On this chart [SHOW CHART] we have figures with and without toothbrushes to represent children in the six grades of [1] an elementary school. The first grade is on the left here [POINT TO FIRST GRADE COLUMN], the second grade is next, the third grade, fourth grade, fifth grade, and over here on the right is the sixth grade [POINT [2] TO SUCCESSIVE COLUMNS GOING FROM LEFT TO RIGHT]. Now, each row here [POINT TO THE ROWS IN SUCCESSION AS YOU EXPLAIN] represents a school year for the program. At the top is the first year of the program, [3] below it is the second year, the third year, the fourth year of the program, the fifth year, and the sixth year of the program.

O.K. Here is how the program worked. In the first year of the program, only eligible first graders were given dental care in the [4] program, as shown by the figure with the toothbrush [POINT TO YEAR ONE FIGURE WITH TOOTHBURSH]. Notice that the children in grades two through six don't have toothbrushes since they were not included in the program. [5]

In the second year [POINT TO SECOND YEAR ROW], the children who were in the first grade moved to the second grade [POINT TO THE TRANSITION ARROW] and were still in the program. Also, in the second year, the new first graders [POINT] eligible for the program got dental care in the program. But, children in grades three through six [POINT] weren't included in the program.

In the third year [POINT], the second-year first graders moved to second grade [POINT] and the second-year second graders moved to third grade [POINT] and both these eligible groups remained in the program. In addition [POINT TO THIRD YEAR ROW], a new group of eligible first graders entered the program. Now there were three grades of children in the program in the third year [POINT], and three grades of children who were not included in the program [POINT]. As you can see from the chart, this procedure of getting children into the program continued each year. O.K., is that clear enough or should I give some more examples? [CONTINUE EXPLANATION OR REPEAT EXPLANATION IF REQUESTED.]

---

44. Now that I have explained how the program worked, did you already know about it or is this new to you?

| % | | | |
|---|---|---|---|
| P(60.3) | A(57.7) | Knew already. . . . . . . . . . | [ ] 1 |
| (39.7) | (42.3) | Didn't know . . . . . . . . . . . | [ ] 8 |

45. Do you find this way of running the program ...

| % | | | |
|---|---|---|---|
| P( 6.9) | A(34.6) | Highly acceptable,. . . . . . . . . . . . . . .[SKIP TO Q.46] . | [ ] 1 |
| (69.0) | (46.2) | Acceptable, .[SKIP TO Q.46] . | [ ] 2 |
| (22.4) | (19.2) | Unacceptable, . . . [ASK A] . | [ ] 3 |
| ( 1.7) | ( - ) | Highly unacceptable?[ASK A] . | [ ] 4 |

A. What would make it acceptable to you?

______________________________

______________________________

______________________________

______________________________

______________________________

46. If you will look at the chart again [SHOW CHART], you will notice that for the first year of the program, if a family had a child in the first grade and a child in the third grade, then only the first grader would get in the program, but not the third grader. Or, another example, if a family had a child in any grade, two through six, that child would not get in the program, but if a family had a child in the first grade, that child could get in the program. [PAUSE] Did you hear any complaints about this way of running the program from parents?

| % | | | |
|---|---|---|---|
| P(50.0) | A(26.9) | Yes . . . . . . . . . [ASK A] . | ☐ 1 |
| (50.0) | (73.1) | No. . . . [SKIP TO CLOSING STATEMENT] . | ☐ 2 |

A. Did all, most, or some of the parents complain about this feature of the program?

| % | | | |
|---|---|---|---|
| P( 3.4) | A( - ) | All . . . . . . . . . . . . . . . | ☐ 1 |
| ( 5.2) | ( - ) | Most. . . . . . . . . . . . . . . | ☐ 2 |
| (41.4) | (26.9) | Some. . . . . . . . . . . . . . . | ☐ 3 |
| (50.0 | (73.1) | NA | |

B. Were these complaints ...

| % | | | |
|---|---|---|---|
| P( - ) | A( - ) | Extremely bitter, . . . . . . . | ☐ 1 |
| ( 1.7) | ( - ) | Very bitter,. . . . . . . . . . | ☐ 2 |
| (15.5) | ( 3.8) | Slightly bitter,. . . . . . . . | ☐ 3 |
| (32.8) | (23.1) | Not bitter? . . . . . . . . . . | ☐ 4 |
| (50.0) | (73.1) | NA | |

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[CLOSING STATEMENT]

That's all the questions I have. Thank you very much for your time and cooperation. Your answers have been very helpful.

TIME INTERVIEW ENDED: ____________________ A.M. P.M.

[PLEASE COMPLETE THE INTERVIEWER'S REMARKS IMMEDIATELY AFTER YOU LEAVE THE RESPONDENT]

## INTERVIEWER REMARKS

[TO BE FILLED OUT IMMEDIATELY AFTER YOU HAVE COMPLETED THE INTERVIEW AND LEFT THE RESPONDENT]

DATE INTERVIEW COMPLETED: ____/____/ 77
mo. day year

[HOW LONG DID THE INTERVIEW TAKE?________________MINUTES]

1. Sex of respondent

| % | | | |
|---|---|---|---|
| P(82.8) | A(80.0) | Male. . . . . . . . . . . . . . . | [ ] 1 |
| (17.2) | (19.2) | Female. . . . . . . . . . . . . . | [ ] 2 |

2. Race of respondent

| % | | | |
|---|---|---|---|
| P(81.0) | A(96.2) | White, not Spanish-speaking. . . . . . . . | [ ] 1 |
| (19.0) | ( 3.8) | Black, not Spanish-speaking. . . . . . . . | [ ] 2 |
| ( - ) | ( - ) | Hispanic descent (i.e., speaks Spanish). . . . | [ ] 3 |
| ( - ) | ( - ) | Asian or Pacific Islander. . . . . . . . | [ ] 4 |
| ( - ) | ( - ) | American Indian . . . . . . . . | [ ] 5 |
| ( - ) | ( - ) | Other [SPECIFY] . . . . . . . . | [ ] |

____________________________ ☐

3. Was there anyone besides the respondent present during any part of the interview?

| % | | | |
|---|---|---|---|
| P(29.3) | A(15.4) | Yes . . . . . . . [ANSWER A] . [ ] | 1 |
| (70.7) | (84.6) | No. . . . . . [SKIP TO Q.4] . [ ] | 2 |

A. Who was present?

B. Did this create any problems?

| % | | | |
|---|---|---|---|
| P( 8.6) | A( - ) | Yes . . . . . . . [ANSWER C] . [ ] | 1 |
| (20.7) | (15.4) | No. . . . . . [SKIP TO Q.4] . [ ] | 2 |
| (70.7) | (84.6) | NA | |

C. What kind of problem?

4. [USE THIS SPACE FOR ANY ADDITIONAL COMMENTS THAT MIGHT HELP US INTERPRET THE INFORMATION YOU COLLECTED.]

OFFICE USE ONLY

END CARD 2